

# MANUFACTURERS' RECORD

A WEEKLY SOUTHERN INDUSTRIAL, RAILROAD AND FINANCIAL NEWSPAPER

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## Manufacturers' Record

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BALTIMORE, DECEMBER 19, 1907.

Mr. William Gilmore, Meridian, Miss.,  
in a letter to the MANUFACTURERS' REC-  
ORD, writes:

I consider the MANUFACTURERS' RECORD do-  
ing more material benefit for this section of  
the country than any other single agency that  
I know of. I get the full benefit of every page,  
and allow me to say that I would not be  
without your publication.

### ASTRAY.

It seems as if every unusual or novel enter-  
prise south of the Potomac (outside of West  
Virginia) has a strong string tied to it. At  
first it looks like "easy money," but draw-  
backs develop. The Whitney Power Co.,  
down on the Yadkin river, in North Caro-  
lina, is the latest big Southern scheme to  
fall short of expectations. The preliminary  
announcements in regard to it seemed most  
promising, but evidently it resulted unfor-  
tunately for Mr. Whitney, a fact which his  
many friends in the trade will regret. It  
was he who was instrumental in financing  
the big Pittsburg combinations of 1899, and  
he was until recently the chief owner of the  
Hostetter-Connellsville Coke Co.—*Coal Trade  
Journal*.

What's the matter with the *Coal  
Trade Journal* that it makes such bad  
breaks, with the South as its text? The  
Whitney Power Co. is a magnificent  
undertaking, worthy of the great up-  
building work of Mr. Whitney; but  
because financial conditions in Pitts-  
burg and New York caused Whitney &  
Stephenson to be "frozen out" and to  
lose millions, though their investments  
were of the highest class, why should  
the Whitney Power Co. of North Caro-  
lina be classed as an unfortunate enter-  
prise? The trouble was in Pittsburg,  
not in North Carolina. Mr. Whitney  
will bear testimony to the fact that the

Whitney Power Co. in itself, in his opin-  
ion, has lost none of its attractiveness  
as a great and safe investment.

It may interest our friend, the *Coal  
Trade Journal*, to know that a dispatch  
from Salisbury, N. C., states that on  
the first of the coming year the force  
at work at Whitney will be doubled and  
the undertaking will be pushed to com-  
pletion so that distribution of power  
may begin on July 1, according to the  
long-announced program. The new  
president of the company visited the  
work last week and expressed pleasure  
at the way things are going there.

### WATERWAYS IMPROVEMENTS.

It ought not to be necessary to tell  
anybody that advocacy of prompt and  
liberal provision by the Congress of the

stating that he was not certain that at  
the present time he would favor the ap-  
propriation of a single dollar for the  
deepening of rivers or of the digging  
of canals, might be going to an extreme,  
but it says:

The demands of the Mississippi Valley  
awakened the ambition of the coast ports for  
equal privileges. This was natural. The At-  
lantic seaboard would theoretically receive  
less business rather than more were the Mis-  
sissippi and its tributaries constituted the  
great highways, taking the products of the  
great West more easily and cheaply to the  
Gulf than to our coast. In other words, we  
should have to help bear the cost of side-  
tracking ourselves.

To overcome the obstacle to adequate  
waterways improvement anywhere be-  
cause of a conviction that pushing one  
undertaking might cripple another or  
that the advance for one part of the

the leading and eminently successful  
illustrations of the spirit which has  
given New England its greatness in the  
face of many odds, and it is believed  
that further consideration of the mat-  
ter will demonstrate to it the advantage  
in advocating a policy that will bring  
the best results both to the Atlantic  
seaboard and the Mississippi valley,  
and will prevent both sections from suf-  
fering the loss that must come from  
subordinating the general welfare, of  
which they must have their full share,  
to too strenuous promotion of individual  
aims.

### WINDING UP THE PEABODY ED- UCATION TRUST.

When on February 7, 1867, Mr.  
George Peabody made his gift of a mil-  
lion dollars, the income of which was  
to be applied for the promotion of in-  
tellectual, moral and industrial educa-  
tion among the young of the more desti-  
tute portions of the Southern and  
Southwestern States, he also placed in  
the hands of his trustees bonds of the  
State of Mississippi, commonly known  
as Planters' Bank bonds, amounting,  
with interest, to about \$1,100,000. On  
June 29, 1869, Mr. Peabody gave to the  
trustees of his fund securities amount-  
ing to \$1,000,000, and in addition, Flor-  
ida 6 per cent. bonds, which, with over-  
due coupons, amounted to about \$384,-  
000. Mr. Peabody contemplated the  
possibility that by 1897 his trustees  
might close the trust. The trustees, in  
the exercise of the broad discretion  
given them by Mr. Peabody, omitted for  
a while in the eighties Mississippi and  
Florida from the distribution of the in-  
come of the fund, with the gentle hint  
that such a policy would be maintained  
until the annual interest on the bonds  
should be paid or some provision for  
the recognition and adjustment of the  
bonds should be made.

Ten years have passed since the Pea-  
body trustees have had a right to close  
up the Peabody Trust. Within that  
time the Ogden Movement has had a  
lively interest in the fund. How much  
of the prolongation of the trust these  
ten years is traceable to the effort  
to induce a recognition and adjustment  
of the whole issue of the bonds specially  
mentioned, including those held by the  
Peabody Trust, and to what extent has  
that interest and the desire to involve  
in the Ogden Movement the winding up  
of the Peabody Trust been responsible  
for the delay in ending the trust?

### SPIRIT OF THE BANKS.

In a speech delivered in New York  
last week Governor Hughes, discussing  
the business situation, said:

It is a time for the exercise of sagacity and  
business prudence, but I believe that the  
highest sagacity will be found in the effort  
to see not to what extent credit may be re-  
stricted, but how far it may be safely grant-  
ed; not how many plants may be shut down,  
but how many may be kept open; not how  
many men may be discharged, but how many  
may be kept employed; to see not how many  
orders may be canceled, but how many may  
be filled. It is idle for those to lament the

## THE CURSE—HIS NAME IS LEGION; HIS HOME IS EVERY- WHERE IN OUR LAND.

[From "Commonwealth of Man," by Rev. Robert Afton Holland.]

\* \* \* The sanctimonious hypocrite! Mark him well, work-  
men of Jerusalem, workmen of America. He is not dead yet. His  
head is still in the air, his phylactery full of quoted perfectionisms  
that mock all imperfection, however well-purposed, however close  
upon fulfillment. He is so taken up with the idea of rights that he  
ignores all right, so resentful of oppression that his very look  
oppresses, so busy with his ideals that he is the veriest loafer and  
deadbeat of ethical reality—this Micawber of the Kingdom of  
Heaven. He hates the frauds of capital, and, therefore, sanctions  
fraudulent labor. He abhors the spirit of class, and, consequently,  
organizes labor into class leagues that would deny outside workers  
the privilege of free, honest work. He calls property robbery, for  
which reason he would rob every property-holder of the homestead  
that that holder has bought with his own enterprise or inherited  
from the enterprise of his fathers. Society at large, the universal  
State, is so dear to his schematic world-citizenship that he cannot  
see the social world in the smaller and nearer circles concentric in  
his own will, and widening that will through home and shop and  
school and Commonwealth. Too grandiose for household virtue,  
too virtue, virtue of diligent self-culture, virtue that reverences  
civil order, he affects Atlantean power to toss and catch the round  
world and roll it about his wise head and shoulders.

### THE CURE.

[From Poems of Josiah G. Holland.]

God, give us men! A time like this demands  
Strong minds, great hearts, true faith, and ready hands—  
Men whom the lust of office does not kill;  
Men whom the spoils of office cannot buy;  
Men who possess opinions and a will;  
Men who have honor, and who will not lie;  
Men who can stand before a demagogue  
And scorn his treacherous flatteries without winking;  
Tall men, sun-crowned, who live above the fog  
In public duty and in private thinking!

United States for improvement of the  
rivers and harbors of the country upon  
a broad and comprehensive scale looks  
neither to the immediate tomorrow for  
final results and effects nor to the tem-  
porary gain or loss of any special  
section. It views the country as a whole  
and considers not so much the ambi-  
tions for today of conflicting elements  
in a population of 85,000,000 as the  
needs of the people when it shall num-  
ber 200,000,000, with room in the country  
still for another 200,000,000.

An unfortunate view, but one by no  
means rare, is grazed by the Boston  
*Evening Transcript*, which usually may  
be depended upon to take a broad and  
patriotic position on most questions.  
It suggests that Speaker Cannon, in

country might retard the progress of  
another, is the very purpose of the ad-  
vocates of such measures as the issue  
of \$500,000,000 worth of interest-bear-  
ing bonds to be devoted to the speedy  
and simultaneous improvement of wa-  
terways in all parts of the country jus-  
tified by the future needs of the coun-  
try. Such a policy has been hampered  
in the past by really petty sectional or  
local jealousies, losing sight of the gain  
that should come to all through the bet-  
terment of one and resulting either in  
conflicting interests missing everything  
or the placing of appropriations for  
waterways improvements upon the low  
plane of legislative log-rolling. The  
Boston *Evening Transcript* is not an ex-  
ponent of such jealousies. It is one of

evils of distrust who fail to avail themselves of the opportunities to diminish it.

Commenting on this statement, the *Wall Street Summary* wisely adds:

In the last sentence is there a fruitful text for not only individual citizens, but as well for banks that have been adding to the rigors of the situation by their unpardonable and inexcusable hoardings. The action of many interior banks in this respect was unbusinesslike and unpatriotic, and if they sincerely desire to hasten our recovery they should unloose immediately their hidden treasure.

Referring last week to the fact that the banks of New York had recognized their responsibility to the country to the extent that they had paid out money until their reserves were far below the legal requirements, and it is for just such emergencies as this that this reserve is supposed to be held, the *MANUFACTURERS' RECORD* pointed to the serious mistake which has been made by many banks in other sections who, instead of accommodating their customers, have been piling up currency far beyond the 25 per cent. legal requirement. It is greatly to the credit of New York, and of any other city where the banks have met the situation as the banks of that city have done, that they have recognized their responsibility to the public and have used their reserves for the good of the business interests dependent upon them. This is not a time for bank hoarding, nor is it a time for hoarding on the part of anyone else. It is a time when people with faith in their country, faith in the soundness of its business interests, should do their utmost to keep in full operation, to fill all contracts of purchase as well as of sale; a time when banks should go to the utmost limit of their ability to provide funds needed to carry on the business interests of the land. A few banks have had so little appreciation of what good banking means, so little appreciation of their responsibility to their customers, that they have sent out circulars asking for business on the ground that their reserves were far above the legal requirements. Every bank which takes such a position ought to be shunned by every reputable concern. The bank which ought to be given business is the one whose officers, cool-headed, have met these conditions and stood by their customers, providing them with the usual accommodations to the extent of possible ability. The story is told of the late Johns Hopkins, one of Baltimore's great millionaire benefactors, that when president of one of the leading banks of this city during the stormy times of '73, he continued to meet the requirements of the bank's clients until the directors, frightened by the conditions, undertook to urge him to take advantage of all legal technicalities and not go below the legal reserves. "D— it!" said Johns Hopkins, so the story goes, "I am here to protect the customers of this bank, and if you are afraid of them, any man who needs it in this emergency can get my indorsement to his paper, for no solvent customer of this bank shall suffer for lack of financial accommodation." Some such spirit as that should animate the bankers of the country. It may not be possible to carry it to the extreme to which Johns Hopkins is said to have done, for there are not many people who can afford to take such risks, nor many people whose indorsement would be so gilded and beyond all question in time of financial storm, but the spirit is a spirit which the bankers of the country owe to their customers.

#### THE "TARIFF REVISION" HUM-BUG.

The agitation in favor of tariff revision, which is coming to the front once more, makes timely the telling of a story connected with the Wilson Tariff bill. At the time when that bill was under discussion the *MANUFACTURERS' RECORD* was very strongly opposing it, and the reasons therefor are possibly best told by repeating a conversation which took place between a member of President Cleveland's Cabinet and the writer.

The Cabinet member, meeting the writer on the train one day, said to him:

"Why are you, a Southern man and a Democrat, making such a bitter fight against the Wilson bill?"

"Why are you and those who are advocating the Wilson Bill," asked the *MANUFACTURERS' RECORD*, "seeking to destroy the prosperity of the South, for that will certainly be the result of the measure should it pass in the way it is now proposed?"

And when an explanation of this statement was asked the reply in substance was as follows:

While the *MANUFACTURERS' RECORD* believes in protection per se, believes that it is best for the entire country and for all interests—agricultural and manufacturing alike—it is in this particular case fighting for the South and for the very life of Southern industry. In the Wilson bill you have proposed an average rate of protection of about 40 per cent. on the finished product of the mills and factories of New England and the East generally, but on the raw product, such as iron ore, pig-iron, coal, wool, lumber and other things which the South produces, you are proposing the elimination of all duty. In other words, you are giving to the manufacturers of the finished products in the North and West free raw materials at the expense of the South and then giving them a duty of 40 per cent. on the things which the South must of necessity purchase, since it is a producer of raw material and a buyer of the finished product. The *MANUFACTURERS' RECORD* has faith enough in the South to believe that it can stand in competition with any section of this country on any equal basis, but it demands that the South should at least have a fair show. That section cannot live industrially with a difference against it of 40 per cent. For the benefit of the manufacturers of other sections you are giving them a difference of 40 per cent. in their contest against the South. If you want to see how this situation works, go back to Washington and propose to make free trade on a special line of finished machinery of which the South is a large buyer.

This was done, but it only took about 48 hours for the proposition of free trade on that line of finished machinery to be withdrawn, and yet representatives of the South in Congress, public men throughout this section, and the press, and many others who ought to know better, throw up their hats and hurrah for tariff revision every time it is suggested. They seem to forget that the South needs, and should demand, protection on its raw materials just as much as other sections need and demand protection on the finished product.

#### KENTUCKY'S NIGHT-RIDERS.

The recent outrage by a masked armed mob of night-riders at Hopkinsville has led statisticians to estimate that such outrages of the tobacco war in Kentucky has entailed a loss of nearly \$1,000,000 within the past few months. Grievous as that exhibit is, it is really nothing in comparison with the injury which Kentucky is suffering at the hands of lawlessness. Leading papers of the State are beginning to realize that, and are doing their part to suppress an evil which one of them likens in his virulence to an epidemic of the black plague which once swept Europe. The *Lexington Herald*, for

instance, finds in the widely separated outrages by "night-riders" symptoms of a disease which has been permitted to rage until it has contaminated a large portion of Kentucky. It urges that the disease should have been checked at the first indication of its malignant presence, and it adds:

But nothing was done. The local authorities, either through inefficiency or cowardice, and the State authorities, either through negligence or lack of a sense of obligation and responsibility to the people, failed to exercise the power and duty which was theirs, and the growth of lawlessness is on a par with the growth of the tobacco trust, which for 12 years has fattened on illegal profits and, under the form of law, robbed the people by illegal combination.

The condition in Kentucky today has reached the point where it must be met by the authorities and respect for the law re-established, or else we must face the fact that in Kentucky there is no law to punish an organized mob. Every Circuit Judge, every Commonwealth's Attorney, every Sheriff, every County Judge of a county in which tobacco is grown has upon him an added responsibility and a new opportunity to serve his people and to win commendation for himself. Those who fail to take advantage of this opportunity ought to be, will be, driven from public life. The very men who are today engaged in committing outrages, the very men whose passions have been so stirred as to lead them to approve acts of violence, will in time condemn those acts and not only respect but support officers who regard their oath of office and preserve the right of property and life and liberty inviolate.

Another point which should be emphasized here is that the mob spirit unchecked cannot be confined to a single channel. It feeds upon its very manifestations, and, directed against one object today, may turn upon itself tomorrow. It is nothing but anarchy, anyhow. All friends of Kentucky earnestly hope that the appeal to reason, to law and order made by such papers as the *Lexington Herald* may be heeded, and heeded immediately.

#### DEPORTING POLITICIANS.

Mr. E. L. Propst, president and manager of the Propst Contracting Co., Charlotte, N. C., in a letter to the *MANUFACTURERS' RECORD* says:

We fully agree with you that the financial condition has greatly improved. However, we do not think that railroad construction in the Southern States will be resumed as it should be until the State Legislatures quit fighting the railway companies. Who would be so silly as to furnish money to build new railroads under the present situation in the States of North Carolina, Georgia and Alabama? If some of the States that had appropriated money to import foreign laborers would now use the same money to deport some of the politicians it would be a great deal better for the business interests of the country. We think some of the States have fully settled the labor question for some time to come, as plenty of laborers can be had now, and at a reduced price. We are satisfied that your journal has done more toward building up the Southern States than any other paper published in the country, and it seems to us that you would be somewhat discouraged to see the wheels of progress and prosperity hindered by populist and anarchist State legislation and drastic laws that have been passed against the incorporations in the Southern States. To fully develop the Southern States and take care of the business that we have already we need twice the railway mileage that we now have. We do not think that it is a question of how much money there is, but it will be a question of whether or not the railway companies can get the capital to make the necessary improvements under the present laws that are now being attempted to be put in force.

The thought of using State appropriations to export politicians as a means of assisting material development is a novel one. Politicians might regard it as an act of base ingratitude. For the politicians are responsible for the fact that "plenty of laborers can be had now at a reduced price." Such a situation, though, is not essentially an evidence

that the States have reason for gratitude to the politicians. It is rather an indication that there has been a shut-down of productive operations, and that many men who had remunerative employment or who were being sought by jobs are now out of work and seeking employment at any price.

Unfortunately, though, it is hardly likely that destructive or obstructive politicians can be deported. Even if it was possible to send them out of the States which they have cursed, they would not be received at any other place where they were known. Therefore, as there is no region to which the politicians might be banished for life with nothing to do but indulge in agitation and with nobody to pay the damages, the valuable thought of deporting them must be regretfully dismissed. It is possible, though, to convert them from expensive and dangerous parasites into voluntary or involuntary productive agents. They may be deprived of their occupations of living upon the people of the State whose means of making a living for themselves they persistently menace, and may be sent, under the vagrancy laws, to the workhouse or be set to work upon the public highway. That desirable end may be approached if the representatives of the material interests of the State determine that the energy of the State shall not be hampered by too much occupation in the emptiness of party politics upon which politicians thrive, but shall be devoted to the promotion of the only kind of politics that pays, the politics that encourages progressive and farseeing men to plan for the safe and steady exploitation of a State's natural resources and enables them to assemble the capital of brains, muscle and money to carry the plans into effect. The business interests in the Southern States should encourage the activities of such politicians as Mr. Carville D. Benson, Speaker of the last House of Delegates in the Maryland General Assembly, as long as they are willing to apply in legislation the wisdom expressed by him in a recent interview in the *Baltimore News* bearing upon reform, much-needed reform, in the corporation laws of his State. He said:

So far as the public-service corporations are concerned, I think it well for the Legislature to take up any matters concerning them separately. There has been a tremendous lot of agitation and legislation concerning these corporations in recent years, and much of it has doubtless been necessary, but in whole I am inclined to think that there has not been sufficient stress laid on one fact, and that is that this country is not wholly developed yet, and it will not be unless sufficient inducement is offered to capital to invest its money in developing agencies.

If you can conceive of a country where every inch of ground is bringing forth the utmost of which it is capable, where manufacturing enterprise has reached its limit, where transportation facilities are perfect and the business done an absolutely known quality, then you would have a condition in which it would be logical to pass any number of restrictive laws. But where there is a tremendous opportunity still for development and where that development is attended with financial risks, you have got to give capitalists a chance to make profits commensurate with the risks they run. Otherwise they won't put their money into developing projects.

Every trolley-line extension, every railroad extension, runs at a loss for a certain period after it is put in operation, and there is a possibility that it may never prove profitable. The man who risks his money in such an enterprise ought to be allowed to reap a big reward if it is successful. It ought not to be forgotten that, although he may make a lot of money, everybody in the territory through which his road goes likewise profits. The enterprise is beneficial to the whole public.

The South has been prominent in recent years in its attitude of hostility to corpora-



tions. And yet the South offers possibly the greatest field for development in the whole United States. It will profit very little by its anti-corporation legislation if its progress is thereby retarded a half century.

I am aware that talk of this kind is liable to be misconstrued. I am aware that much of the criticism of corporations is absolutely well founded. They should be made to obey the laws the same as individuals. But I believe, after considering the whole subject, that too little attention has been paid to the fact that our country is yet very far from being wholly developed, and that such development is the chief thing the country needs at this time.

That the South is still progressing in spite of the attitude of hostility to corporations, which has been most pronounced in portions of it in recent years, may be a fact. But it is no justification of that hostility. On the contrary, it only proves what a tremendous loss the South is suffering because of that hostility, the loss of prosperity retarded when naturally it should be speeded. Corporations have their evils, as has everything in which the human element is active. But very, very few of the evils wrought by an individual against his fellows call for his death, and in like manner the ills of corporations may be cured without killing either them or the State which needs them to enable it to live its full life. Mr. Benson's striking review of the situation should command the attention of the whole South.

#### NEW RAILROADS SHOULD BE ENCOURAGED.

Much interest and also antagonism has been aroused within the last few days by the application in Virginia to charter the Fredericksburg & Southern Railroad Co., which proposes to build a line about 40 miles long from Fredericksburg southward to Doswell, Va. Objection has been made by the Richmond, Fredericksburg & Potomac Railroad Co. and also by the State, which is a stockholder in that line, attention being called to a clause of the Virginia code in regard to the prohibition of any railway company paralleling the existing route. In this connection it is pointed out that Doswell, at the southern end of the proposed road, is but six miles from Ashland, a terminus of the Richmond & Chesapeake Bay Electric Railway, and that it is evidently intended to connect the two. In fact, this was admitted to be true by counsel for the last-named road, who also informs the MANUFACTURERS' RECORD that the application for the new charter is on behalf of Mr. Frank Jay Gould, and it is his intention to build the road in connection with his other enterprises in that section. A hearing on the application was held before the State Corporation Commission and decision was reserved.

These proceedings are of much more than passing importance, and it is to be earnestly hoped that the result will be such as to commend itself to broad-minded and progressive men. Unless it can be shown that there is some deliberate plan to build a road which would be in violation of a statute, it appears that the charter asked for ought to be granted, without considering the State's interest as a stockholder in any line or other alleged objection. Of all times, this is not the one in which to discourage enterprise nor to check progress, particularly in such a section of a great and prosperous State as that in which it is proposed to build the line in question. It goes without saying that the law-makers who were responsible for the clause to safeguard the interests of the State in the old road did not contemplate forever prohibiting the entrance

of any other railroad into any part of its territory or of territory contiguous. Virginia, like all the other States of the South, needs new railroads to develop her great resources, and it would be extremely shortsighted to throw unnecessary obstacles in the way of getting them. The backers of this new road have in particular given evidence of the sort of transportation facilities they propose to give the public. The Richmond & Chesapeake Bay Railway, from Richmond to Ashland, 15 miles, was but lately completed, and is admitted to be a very superior piece of double-track electric railway construction and equipment. The proposition to extend this line to Fredericksburg appears to be one meriting encouragement and support.

The time is past when any railroad corporation or any State can afford to throw any obstacles in the way of the building of new roads. It is a time when the doors should be thrown wide open and the fullest rights given to every legitimate railroad enterprise, regardless of what road it competes with, and if existing State laws make this impossible, then they should be changed to meet the needs of the times. The country needs every mile of road that it can possibly get, and it will require many thousands of miles more than there is any likelihood at present of its getting within the next few years.

#### AS AN ADVERTISING MEDIUM.

Mr. Hugh Carney, Secretary of the city of Atlanta, Texas, under date of December 10, writes to the MANUFACTURERS' RECORD:

Having occasion recently in my capacity as real-estate agent to place an ad. in your paper from which I received satisfactory results, I told the City Council of this city, of which I am Secretary, of the same, and was instructed to place the enclosed in your paper for two months. Kindly do so, make out bill for same immediately, and it will be paid at next meeting of City Council.

Coming along at the same time is a letter from Mr. G. Reuben Butler, clerk of Commissioners of Chatham county, Georgia, saying:

I beg to confirm my wire of the 10th inst. asking you to insert our advertisement asking for bids for building bridge over the Big Ogeechee river in your issue of the 12th. The number of inquiries in response to the advertisement that appeared in the MANUFACTURERS' RECORD on the 5th justifies us in having it appear again.

These are samples. They but join in the chorus of thousands who praise the MANUFACTURERS' RECORD as an advertising medium. Those who have tried the MANUFACTURERS' RECORD the longest are its warmest and staunchest friends. A number of them—a very large number, in fact, in proportion to the total at that time—have been with us for from 20 to 25 years, and if a newspaper can be judged by the character of its advertisers and the length of time which they stand by it, there is no other publication in the country that has a prouder record than the MANUFACTURERS' RECORD.

#### TO ATTRACT CAPITAL.

South Carolina has escaped much of the injury wrought in other States by radical legislation against railroads and other corporations, but that fact is not preventing South Carolina from reinforcing the movement in the South toward a return to sanity on the part of its law-makers. Business organizations of that section are setting the pace for the movement in resolutions of a conservative character, and on that line is the action taken last week by the Chamber of Commerce of Sumter, S. C. That body unanimously resolved that it is incumbent upon every

good citizen to interest himself in insuring a wider and fuller development of the natural resources of the State; that for such an increased railway mileage and facilities to handle increased business are necessary, and that, therefore, the chamber favors the utmost liberality on the part of the State authorities toward all transportation companies undertaking to provide transportation in the State in conformity with law. The chamber favors fair and reasonable laws, fairly and justly administered. That kind of a spirit dominant in the administration of any State is bound to attract to the State the capital needed for State development.

#### FARMERS AND WATERWAYS.

Indicative of the widespread and deeply seated interest in the improvement of the waterways of the country is a resolution adopted by the Farmers' National Congress at its last annual session, which was attended by 986 delegates from 27 States. The resolution pledges the co-operation of the Farmers' National Congress with the Rivers and Harbors Congress in "an appeal to the executive and legislative branches of the National Government to inaugurate at once a broad national policy of waterway development and to pursue a course of legislation which will insure annual appropriations for this important public work, carrying not less than \$50,000,000 every year, to the end that the systematic development of all worthy rivers, harbors and channels the country over may at once be entered upon with vigor and carried forward to completion without abatement or interruption."

#### CALENDARS AND CARDS.

For the holiday season the Raphael Tuck & Sons Company, Ltd., of New York has put out its usual artistic line of calendars, cards and gift books. There is the widest sort of range in calendars, from the tiny five-cent ones to those costing \$3 or \$4. Time or large, they all are up to the standard of high excellence in design and execution which characterize the Tuck publications. Among the most attractive of the larger ones are the Ruskin, the Shakespeare, the Turner, the Millais and the Landseer calendars. A novelty in the Christmas and New-Year cards which will appeal to many persons are those bearing embossed designs in colors. This feature also appears in many of the company's booklets. Its colored souvenir post cards also offer opportunities to those persons who desire to send their friends convenient and permanent remembrances at the Christmas season.

#### THE COTTON MOVEMENT.

In his report for December 13 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, showed that the amount of cotton brought into sight during 104 days of the present season was 5,491,410 bales, a decrease under the same period last year of 1,288,132 bales. The exports were 2,985,095 bales, a decrease of 424,093 bales. The takings were, by Northern spinners, 608,392 bales, a decrease of 293,038; by Southern spinners, 838,900 bales, a decrease of 12,800 bales.

#### OPTIMISTIC CLUB OF AMERICA.

##### A Novel Organization for Purpose of Dispensing Cheerful Philosophy.

This novel organization was recently organized, with headquarters at Salt Lake City, Utah, with Charles A. Quigley, the vice-president and general manager of the Studebaker Bros. Company of Utah, as its president, and the desire of the organization is to create a local club in every hamlet, village, town and city in the United States. Col. Charles Arthur Carlisle of the Studebaker Bros. Manufacturing Co. of South Bend, Ind., has gotten back of

the Optimistic Club of America, and is pushing it forward to success in every direction. The philosophy of the club, subject to modification and addition, is as follows:

"God reigns; the nation still lives and the sun still shines, even though the clouds obscure it."

"There are more people dying each day for the lack of a kind word, a pat on the back and a little encouragement than there are from disease."

"A smile is potential, magnetic, and dispels trouble."

"The man who never makes any mistakes never makes anything else."

"Hard-luck stories are like overdue notes."

"Go bury thy sorrows, the world hath its share. Just smile."

"Before money was invented some people were happy."

"Shake hands as though you meant it, and smile."

"Nobody can compute the value of a smile; a frown has cost a kingdom."

"Nobody can really harm you but yourself."

"You are under a real obligation to every man on earth."

"You can't put influence in a glass case."

"When in doubt, take optimism."

"In darkness, in light, in sorrow, in blight, be an optimist ever, and things will come all right."

"Optimism is the first-born of hope, the mother of confidence, the executioner of adversity and the undertaker of pessimism."

"A frown is a renegade smile that is afraid to look itself in the face."

"On the faces of the happy aged it is a well-known fact that wrinkles are only the footprints of smiles."

"On the vehicle of modern progress the creak of the wheel is the pessimist protest; a little optimistic lubricant will silence both the creak and the creak."

"The optimist wins."

"The greatest smiler is the greatest healer."

"Smile, and the world delights with you; creak, and you creak alone."

"A smile is God's own medicine."

"A grin is a counterfeited smile, and does not pass current because the heart stamp of genuineness is not upon it."

"Optimism and pessimism have fought many bloody battles; if optimism had not been a victor up to date, hope would have died years ago."

"In the realm of the birds the lark is the optimist, the crow is the pessimist. Why be a crow?"

"Clearing-house certificates and tight financial conditions have afforded more people who never had a dollar an excuse for their hard-luck stories than anything that has happened since the Civil War."

"Let optimism and the optimist destroy the last hope of the pessimist, and perfect confidence will again prevail, with peace and plenty for all."

"Fall into line and the sunshine of the home and the glory of trade will reflect the delight of a gracious personality."

Organize a local club; improve upon the philosophy quoted above if you can; print and spread your work, and let the motto of your club be:

"Not until every man and woman has been successfully enlisted will we haul down the unconquerable flag of determination."

The monthly report of Messrs. J. M. Lang & Co. of Savannah, Ga., showing shipments of phosphate rock made through the port of Savannah during the month of November indicates a total of 14,705 tons. Shipments were made to Germany, Austria and the Netherlands.

### CHARLESTON'S ADVANTAGES.

#### West Virginia's Capital City Succinctly Described.

[Special Cor. Manufacturers' Record.]

Charleston, W. Va., December 17.

The Chamber of Commerce has just gotten out a handsome booklet which sets forth in compact form many of the advantages offered by this city as a place of residence and a location for business, manufacturing and other. The cover design by Mr. Thomas W. Moore, a young artist of the city who has recently made a more than local name for himself in the realm of art, is an attractive one, and the frontispiece is a picture of the coal mound erected by West Virginia on the grounds of the Jamestown Exposition. The text of the book, compiled and written by Mr. Leo Loeb, under the direction of the special committee of the Chamber of Commerce, is of the kind that throws interest into dry statistics and prosy facts and so lightens them up as to make them easily readable. Possibly the most interesting feature of the work is that part of it which is devoted to a description of the locks and dams on the Great Kanawha river, which make it possible for coal-laden barges to be run down the river to its junction with the Ohio on any day in the year. These dams are movable, so that when the water is low they may be raised so as to form pools, and when the water is high they may be lowered so that the boats can run over them without hindrance and with no locking to do. Figures are given showing the amount of tonnage and the money value of it carried on the river during the year 1906, as follows:

Articles.	Tonnage.	Value.
Coal.....	1,176,300	\$1,176,300
Coke.....	500	500
Timber.....	34,002	155,440
Staves, oak.....	1,372	2,928
Bark and wood for tanning.....	1,230	2,050
Hoop poles.....	1,327	3,186
Laths.....	388	6,797
Railroad ties, oak.....	36,842	120,890
Shingles.....	73	1,212
Bricks.....	1,590	5,088
Salt.....	782	6,149
Merchandise and produce on steamboats.....	73,297	8,296,064
Total.....	1,327,703	\$9,776,804

Four railroads are shown to enter the city—the Chesapeake & Ohio, the Kanawha & Michigan, the Coal & Coke and the Kanawha & West Virginia—and the fact is brought out that the oldest and far the most important of these, the Chesapeake & Ohio, has enjoyed a doubling of its tonnage in and out of Charleston in the past five years.

In the jobbing line the city is shown to have one or more houses handling dry goods, groceries, hardware, electrical supplies, bottled goods, lumber, paints, furniture, notions, hats, shoes, drugs, chemicals, confections and men's clothing. Over 200 traveling men represent these concerns "on the road."

A list of the articles manufactured here is given as follows: Axes, cythes, etc.; bookbinding and blank books, boxes, bread and other bakery products, brick and tile, carriage and wagon materials, carriages and wagons, cars and general shop construction, cement, chemicals, clothing, men's; concrete blocks, confectionery, cooperage, coppersmithing, sheet-iron working, dyestuffs and extracts, electrical supplies, flour and grist-mill products, foundry and machine products, furniture, gas, illuminating and heating; hand stamps, ice, iron and steel, malt liquors, lumber products, marble and stone products, mattresses and beds, mineral waters, overalls, paints, shirts, patent medicines and compounds, printing and publishing, saddlery and harness, steamboats, woolen blankets, etc.

The book contains the report of the committee appointed last spring to have a census taken of the city, and the report showing that the work was done in the most careful manner and that the people

reported, 23,404, were bona-fide residents, transients being all excluded. The committee calls attention to the fact that a very large proportion of the men employed in the city have families elsewhere, not being able to secure houses for them here, and that the "roomers" in the city number nearly 5000. It strongly recommends the taking of steps for building a large number of houses for rent. The committee says the record of Charleston's increase, from 11,099 in 1900 to 23,404 in 1907, was only equaled between 1890 and 1900 by one city in the United States—South Omaha.

The book, which bears the name "The Greatest Progress of Greater Charleston on the Great Kanawha," summarizes the situation and conditions in an original way in "The A B C of Greater Charleston."

As a further instance of what the campaign of education entered upon by the Chamber of Commerce some four or five years ago is accomplishing, the fact may be noted that the Banner Glass Co.'s plant, removed to South Charleston from Shirley, Ind., began to make glass this week. The Dunkirk Glass Co. and the Kenton Iron & Steel Co., two other South Charleston acquisitions, are going ahead with their buildings, and will be at work turning out glass and steel before many more weeks pass.

GEO. BYRNE.

### KENTUCKY COAL FIELDS.

#### Northern and Eastern Capital Developing There.

[Special Cor. Manufacturers' Record.]

Barboursville, Ky., December 16.

Some large deals have been made during the past week in coal lands in this section, and important developments will be started during the next few weeks. There has been an influx of Northern and Eastern capital lately, which greatly augments the development forces. Local investors are also recognizing the increasing scarcity of desirable coal lands, and are purchasing large tracts of undeveloped territory.

Probably the largest concern to be organized during the past year is the Southern Coal & Coke Co., incorporated last week with a capitalization of \$300,000. The company is composed of Barboursville, Lexington and Mt. Sterling capitalists, and has completed a deal for 5040 acres of undeveloped coal lands in lower Knox county, where the building of the new Cumberland Railroad is greatly stimulating developments. J. M. Bigstaff, Mt. Sterling, Ky., is president of the new concern. The main office will be at Mt. Sterling, with branch office in this city. The company plans the early development of its large holdings. Some of the land is tapped by the Cumberland Railroad, which is at present a feeder to the Louisville & Nashville system. The Southern Coal & Coke Co. will open a number of mines, and expects to be in shape to produce a large tonnage by next spring. Coke ovens will be installed later.

The Interstate Coal Co. is also a new organization of the past week. The company has acquired a valuable acreage in the Brush Creek fields, and expects to begin operations at an early date. Knoxville (Tenn.) capital is behind this concern, which has not yet fully mapped out its plans. Later an office will be opened here.

The Knox Coal Co. has been organized by local operators to develop territory in lower Knox county. W. R. Black of this city is interested in this concern, which has not yet decided on development plans.

While great activity is being evinced in new developments in sections which are already touched by the railroads, some large investments in coal lands entirely apart from railroad facilities are con-

stantly taking place. The biggest deal of the year in undeveloped territory was made last week, when John E. Golden of this city sold to J. J. Hoblitzell of Meyersdale, Pa., 15,000 acres of coal land in Leslie, Perry and Letcher counties. The purchase price, while regarded as large, was not made public. It is understood here that Mr. Hoblitzell will hold the territory pending the extension of railroads through that section, and that developments will then be started. Other Pennsylvania capitalists are said to be interested with Mr. Hoblitzell, who has already expended several hundred thousand dollars in oil developments in this section.

Leslie, Letcher and Perry counties contain some of the most extensive undeveloped coal acreages in the South. From 8 to 10 seams of coal underlie the mountains, all of workable thickness. It is regarded as a matter of only a few years until that part of the State is thoroughly penetrated by railroads.

The Davis estate, which owns over 100,000 acres of undeveloped coal lands in Harlan and Bell counties, will probably carry out some extensive development projects next year. The company has had considerable litigation over its vast holdings, but matters are now being adjusted, and operations will soon begin. The Davis estate has headquarters in New York, with branch office at Middlesboro, Ky.

On the Virginia side the Virginia Iron, Coal & Coke Co. has completed one of the largest plants in the Kentucky-Tennessee-Virginia field at Linden, near Appalachia. The plant is equipped with electric haulage and mining, and a large production will be obtained.

While other railroad companies are curtailing construction work because of the money stringency, the Louisville & Nashville system is going ahead with projects designed to facilitate traffic in the coal fields. The Cumberland Valley line, which handles the constantly-increasing coal tonnage of the Kentucky-Virginia fields, is being revised at many points, and the company will substitute locomotives of greater tonnage when improvements are completed. Coal car storage yards are being constructed between this city and Middlesboro, and will relieve the congestion which at times causes trouble.

Pennsylvania capitalists are now conducting extensive oil and gas developments in several sections of Southeastern Kentucky. Last week operations were started in upper Whitley county, and if gas is found in sufficient quantities for commercial purposes pipe lines will be extended to several points of consumption. A gas field of promise has already been developed in this section by the Cumberland Natural Gas Co. of this city. Further drilling is planned.

Southeastern Kentucky contains oil fields of promise, and when conditions for development are better some pools of consequence will doubtless be developed.

W. S. HUDSON.

### THEY DO THINGS IN LOUISVILLE.

#### Part Played by the City's Aggressive Commercial Club.

[Special Cor. Manufacturers' Record.]

Louisville, Ky., December 13.

The Louisville Commercial Club gave a reception last night to the 362 members who recently joined the organization. They were all on hand. And so apparently were nine out of ten of the other and older 2700 members, who jammed themselves into the room at the Louisville Hotel. Emphasis was given in the addresses to the commercial development of the city and its splendid position with respect to the outlying South, and great things, reflecting largely the prophecies of the MANUFACTURERS' RECORD, were predicted for the

city, State and section. Waterways development was well handled, and the nine-foot stage of the Ohio at Louisville was referred to.

The Commercial Club does things; its initiative and invention keep the Louisville interested. One year it was a homecoming; this past year it was the Greater Louisville Exposition, and for 1908 plans for something "different" are already being laid. The first thing of the new year is likely to occur on January 1, but maybe it isn't fair to reveal the idea until everything is complete.

With all the energy shown it is little wonder that the human dynamo, Secretary Hughes, should have broken down. During his enforced absence A. T. McDonald has been made acting secretary. Mr. McDonald likewise does things. He organized the Bureau of Industries of the Commercial Club and began pounding the idea that Louisville had its future ahead of it into the minds of outsiders. Some of the natives apparently did not know the precise whereabouts of the city's future, and some didn't care. McDonald told them and some thousands of others, and things began to move.

Then in order not to hamper the club in its own activities, the idea was presented of incorporating the bureau as a distinctive force. Presto! and it was done. A State fair was being held, but the bureau incorporated. An election was under way that turned the State Republican, but the bureau never halted in its work. The street-car men went on a strike, and thousands of citizens walked. So did McDonald; he and the bureau went out arm in arm and corralled 150 of the big business houses into the membership list of the Bureau of Industries, Incorporated.

That initial list of 150 looks like the classified department of a city directory. Many of the firms are known all over the South, and some of them all over the country. When 200 names are secured the charter list will be closed, and then real earnest work will begin in shoving the city with a mighty shove.

They do things in Louisville. It is a spirit that catches the corporate body and seeps through till it reaches the individual. And the commercial activities are not permitted to enjoy a monopoly; the social organizations have annexed their share, as is shown by the fact that the very night of the Commercial Club reception the Scottish Society elected this same McDonald the brau' Scot as president of their own concern.

They do things in Louisville with a sweeping, irresistible onslaught that won't take "no" for an answer.

A. C. BOUGHTON.

### Boiler Works Needing Location.

Changed conditions sometimes make it advisable for an industrial plant to change its location, and the MANUFACTURERS' RECORD is advised of such an instance. The information is presented in a letter from E. A. Ryan, operator of the Sistersville Boiler Works at Sistersville, W. Va. Mr. Ryan says that he contemplates removing his industry to some field of activity where the general markets for boilers, tanks and similar products can be readily reached in shipping. Organizations promoting the manufacturing progress of their sections are invited to send full details of advantages to Mr. Ryan.

Of the total of 199,694 short tons of crude metallic zinc from American ores produced in 1906, Missouri produced 130,348 tons, or 65.27 per cent., Colorado being second in production, with 32,456 tons. Arkansas produced 1801 tons, Virginia 1143, Kentucky 335, Tennessee 124 and Texas 8 tons.



## More Than a Million Tons of Coal Mined Daily.

By FREDERICK E. SAWARD.

[Written for the Manufacturers' Record.]

This year of 1907 is a record one for coal production of all kinds, and particularly is this shown in the output of bituminous coal, which will aggregate a volume that would have been unthought of, say, even five years ago. Here we are with over 1,000,000 tons a day put out of the mines, and until a few weeks ago there was not "enough to go around." A few facts in regard to the growth of the soft-coal trade of this country are of more than passing interest at this time.

Only thirty-odd years ago Illinois and Pennsylvania took a year to produce a tonnage that now could be (and is) turned out in one month, while West Virginia in 1907 produces in less than a week as much coal as was produced in that State in the year 1869.

Particularly noticeable is the growth of the soft-coal tonnage in the last half-dozen years. It might reasonably be supposed that with output on such a large scale the rate of increase would become smaller, but it goes forward with mighty strides, and a prolongation of the line of output indicates a tonnage of 500,000,000 tons, 1,500,000 tons a day for every day in the year, practically, at a time no further distant than 1912. At present the bituminous tonnage is more than five times as great as the anthracite output. Pennsylvania continues to supply its full proportion of the entire output, and (including anthracite output) turns out nearly as much coal as all the other States together.

The bituminous coal trade has quintupled since 1885. The increase alone of the year 1903 as compared with 1900 is as much as the whole aggregate output of the United States in all years prior to 1857, and since 1903 the tonnage has grown 80,000,000 tons.

Since 1896 the increase in tonnage has been constant (save for a standstill in 1904), and has amounted in all to 230,000,000 tons, and has nearly trebled the tonnage in 10 years. The bituminous trade may now be said to be six times as large in volume as the anthracite business. It is three times as great now as it was no further back than 1894, and five times as great as in 1885.

The output this year will be as great as the total production for all years prior to 1874, and adding the output of 1906 and 1907 we have a tonnage equal to all the business prior to 1882.

Scarcely less noticeable than the volume of the bituminous business is the concentration of control, so that now a score or more companies control a tonnage equal to fully one-third of all the soft coal used in the United States, and as to the utilization of bituminous coal, there appears no reason, despite the large increase in tonnage, to change the assertion of a few years back that nearly one-half of the whole output, aside from that exported or used for coke-making, is used by the railway and steam navigation companies of the United States and Canada.

The prominent factors dominating soft-coal operations are as follows:

Companies.	Annual output.
H. C. Frick Coke Co. and allied interests.....	24,350,000
Pittsburg Coal Co.....	21,000,000
Monongahela River Consolidated Coal & Coke Co.....	7,000,000
Rochester & Pittsburg Coal & Iron Co.....	6,000,000
Keystone Coal & Coke Co.....	5,000,000
Berwind-White Coal Mining Co.....	5,000,000
Pennsylvania, Beech Creek & Eastern Coal Co.....	4,500,000
Westmoreland Coal Co.....	2,500,000
Vesta Coal Co.....	2,500,000
Pittsburg & Westmoreland Coal Co.....	2,000,000
W. J. Ralney.....	1,500,000
Cambria Steel Co.....	1,500,000
United Coal Co.....	1,500,000
Total for Pennsylvania.....	84,350,000

Watson Interests (West Virginia).....	9,000,000
Davis Coal & Coke Co. (West Virginia).....	1,500,000
Consolidated Coal Co. (Illinois).....	2,500,000
Chicago, Wilmington & Vermilion Coal Co. (Illinois).....	1,250,000
Spring Valley Coal Co. (Illinois).....	1,250,000
Madison Coal Co. (Illinois).....	1,250,000
Pocahontas Consolidated Collieries Co. (Virginia).....	2,500,000
Sunday Creek Co. (Ohio).....	9,000,000
J. W. Ellsworth & Co. (Ohio).....	4,000,000
Dering Coal Co. (Indiana).....	6,000,000
Tennessee Coal, Iron & Railroad Co. (Alabama).....	5,000,000
Colorado Fuel & Iron Co. (Colorado).....	5,000,000
Central Coal & Coke Co. (Missouri).....	5,000,000
Gould Coal Companies (Missouri).....	2,500,000
Utah Fuel Co. (Utah).....	1,500,000
Total for other States.....	57,250,000

Total for above 28 concerns is 141,600,000 tons, or 40 per cent. of the whole bituminous product of the United States.

Some of the companies enumerated above operate in two or more States, and in such cases their output has been credited to the States in which they are chiefly interested.

The bituminous output of the chief coal-producing States in certain years has been as follows:

	1869.	1906.
Pennsylvania.....	7,788,518	129,532,991
West Virginia.....	608,878	43,290,350
Illinois.....	2,624,163	41,480,104
Ohio.....	2,527,285	27,731,640
Alabama.....	11,000	13,107,963
Indiana.....	437,870	12,092,560
Colorado.....	4,500	10,308,421
Kentucky.....	150,582	9,653,647
Iowa.....	263,487	7,266,224
Tennessee.....	133,418	6,259,275
Wyoming.....	50,000	6,133,994
Kansas.....	32,938	6,024,775
Maryland.....	1,819,824	5,436,463
Virginia.....	61,903	4,254,379
Missouri.....	621,990	3,768,008

There is considerable agitation over the probable increase in waterways, and one of the latest streams to be improved by the General Government which would lead to traffic in coal is the Warrior river in Alabama.

Some recent figures showing the movement of coal over certain interior waterways in this country are to be found in the just issued report of the Department of Commerce. They tell the story as nothing else will of the importance of these waterways for the carrying of heavy materials, such as coal, ore, etc. The few facts may open the eyes of some people.

Traffic movements on the Great Lakes during October, as measured by the volume of shipments from the various lake ports, aggregated 11,826,003 net tons. Domestic iron-ore shipments for the month, mainly from Lake Superior and Michigan ports, 6,321,057 gross tons, exceeded shipments during any other month of the season except August, and were 42 per cent. larger than the October, 1906, shipments. Like shipments for the 10 months of the current season, 36,953,435 gross tons, were 15 per cent. in excess of the corresponding 1906 shipments.

Shipments of soft coal for the month, mainly from Lake Erie ports to the head of the lakes and Milwaukee, 1,642,612 net tons, were below the figures for the two preceding months, though 14 per cent. in excess of October, 1906, figures. Shipments for the 10 months of the year, 13,284,763 net tons, were about 25 per cent. in excess of the corresponding 1906 figures. These totals are, however, exclusive of the quantity of bunker coal placed aboard vessels engaged in both domestic and foreign commerce on the Great Lakes.

As to movement on the Monongahela river, down-stream traffic during the month at Lock No. 3, representing the maximum down-stream movement on the river, 1,029,647 tons, shows a considerable increase over the preceding year's figures, owing to heavier coal traffic during the month. The down-stream traffic of Lock No. 3 for the 10 months, 8,404,177 tons,

shows larger volume than for the corresponding periods in the two preceding years.

Down-stream traffic by way of Davis Island dam for the first 10 months of the year aggregated 2,419,135 tons, composed chiefly of coal, though comprising also considerable quantities of iron and steel manufactures and miscellaneous merchandise. The number of vessels passing the dam in either direction during the 10 months of the year, 21,571, is more than double the number reported for the corresponding 10 months of 1906.

Traffic through the Louisville and Port-

land canal and falls at Louisville, Ky., for the season ending October is given as 1,301,635 tons, of which 1,151,765 tons was represented by coal and 69,606 tons by miscellaneous merchandise. Figures for the corresponding periods of 1906 and 1905 were 968,759 tons and 1,505,753 tons, respectively.

The coal traffic on the Kanawha river for the 10 months ending with October was 1,317,283 net tons, as compared with 913,570 tons in 1906. The low cost of moving heavy freight over waterways, as compared with rail, is too well known to be exploited in this article.

## SECURED FOR SAVANNAH.

### Material Effects of Determination Coupled With Energy.

[Special Correspondence Manufacturers' Record.]

Savannah, Ga., December 7.

Savannah is the live wire of Southern seaboard cities. While others have relied upon their good harbors, their excellent railroad connections or their great financial strength to carry them to higher positions in commerce and trade, the hustling, enterprising men of Savannah have been active in securing by personal effort what they wanted and what their city needed. They had water that, with some work, could be made a good harbor, and they went before Congress and demanded that they be allotted a share of the money that was being distributed at biennial periods, and they repeated their demands with such insistence that they finally got the name of their port down on the list for appropriations aggregating \$7,571,983. Then, when the Government showed that \$2,000,000 of this money had been embezzled, they went back to Congress and said: "Government officials, for whom we were in no wise responsible, embezzled \$2,000,000 of our money, therefore you owe us \$2,000,000; pay up." In short, the people of Savannah have adopted the great American motto, "Blessed is he that asks for what he wants, for he may get it."

This same spirit of going out after what is wanted that proved so effective with the Government has controlled in other things. If a commercial institution, an industrial establishment or a manufacturing plant is looking for a location, the Savannah people actively interest themselves in securing it for their town, and if they don't get it, the folks who do have cause to remember thereafter that they have had a scrap.

And the effect?

Why, the effect has been just as it has been in every other city whose people have employed the same tactics—the securing of a large number of valuable plants of one kind or another that have brought men and money, have given employment to labor and helped in every way to build up the city and add to its strength as a commercial and financial center, made it the seventh port in the country in value of exports, and the largest, by the same measure, between Baltimore and New Orleans, and caused its imports to jump from \$645,067 in 1901 to \$2,168,904 in 1907. In short, the people of Savannah have been as alert, active and energetic as the people of any city in the country, and the results of that energy and activity have been as profitable as those reaped anywhere else.

Since the beginning of the present century the strides made in leading lines of progress have been marvelous, when it is considered that Savannah is one of the old cities of the country. From 1900 to 1906 the increase has been in population 26 per cent.; in imports, 300 per cent.; in exports, 30 per cent.; in postoffice receipts,

57 per cent.; in real estate values, 17 per cent.; in railroad tonnage going out, 60 per cent.; in capital employed in manufactures, 121 per cent.; in value of manufactured products, 125 per cent. The bank assets rose from \$11,893,069.50 in 1900 to \$19,207,769 in 1907, and the bank clearings from \$182,261,154.19 in 1901 to \$242,594,620 in 1906.

Recently there have been located in the city, most of them because of the energetic efforts of the men here who do things, plants to manufacture carwheels, buggies, tin cans, artificial stone, handkerchiefs, soil pipe, printers' ink, hay presses, excelsior, overalls, cigars, sheet-iron products. Some of these factories are very large, and all are thoroughly equipped. One of the most important is that of the American Can Company. This is the forty-eighth plant built by this company, the others being in the North and West, and is one of the most complete of its kind. It will give employment to 300 people and pay out in wages more than \$100,000 annually. The factory of the Henderson-Hull Buggy Co., completed last spring, is one of the largest and most modern of its kind in the South, and employs 250 men, most of them highly-skilled and highly-paid mechanics. This concern's payroll will add largely to the gross of the wage money distributed in the city. The new plant of the Decatur Carwheel Co. is another complete and modern concern that employs a large number of men. The other plants mentioned are smaller in size, but equally important in making up the total sum of the city's industrial life. Among the older manufacturing establishments of great importance is the Savannah Locomotive Works and Supply Co. This company manufactures locomotives for lumber plants, and does a regular business in logging trucks and mill and logging supplies. Two fertilizer plants give employment to many laborers during the busy season, while other establishments are engaged in manufacturing turpentine stills and camp supplies, cotton goods, cooperage, boxes, fruit crates, baking powders, boilers, bridges, brooms, burial caskets, molasses, water purifiers, sail material, trunks and valises, pants, umbrellas, mirrors, ladies' wearing apparel, iron and brass castings, awnings, tents, mattresses, hosiery, soap, pickles, water tanks, iron pipe, agricultural implements, cooking oils, proprietary medicines, screens, lard, cornice, butter, cheese, boots and shoes, malt beverages and half a hundred other articles of ordinary use, not to mention the shipbuilding yards, where vessels of all sizes are constructed, and the woodworking establishments, where the lumber sawed in the vicinity is worked into sash, doors, blinds, newel posts, flooring, molding and the various other forms into which it must be changed to be made

available for immediate use. In fact, the manufacturing era has arrived in Savannah, and due advantage is being taken of it.

Like all the Southern coast towns, Savannah is the center of a great development in the lumber industry, and both here and at almost every crossroads in the surrounding country sawmills are running to cut the forests into merchantable lumber. In the past year the shipments of lumber from this city have reached the great amount of 205,000,000 feet, and next year will witness a very considerable increase in this total. For the handling of cotton and cottonseed products there are here 7 brokers, 24 exporters, 17 factories, 1 cotton mill, a pickery, 3 compresses, 5 warehouses and 2 cottonseed product companies. During the last season the city handled 13.50 per cent. of the cotton crop of the entire country, being third to Galveston's first with 23.67 per cent., and New Orleans' second with 14.72 per cent. The value of the cotton exported through this port last year was \$72,000,000. Of cottonseed products there were handled here 180,000 barrels of oil and 24,537 tons of meal, while the seed itself amounted to 5700 tons.

In naval stores—turpentine, rosin and rosin oil—this city stands first as a primary market. Here the prices are made for all the world, and buyers here handle 75 per cent. of all the receipts at other ports. The finest and most commodious yards for the storing of rosin and the largest sheds and tanks for the reception of turpentine are here. Five States contribute to the aggregate of the receipts at this port—Georgia, Alabama, South Carolina, Florida and Mississippi. The exports of these articles last year from here were 637,282 barrels of rosin and 185,647 barrels of spirits of turpentine, a total of 822,929 barrels. The phosphate mines of Florida have lately been shipping a large proportion of their output through this port, the amount going through last year being 191,791 tons. This business is increasing right along, and the total for the present year will far exceed these figures.

In the matter of transportation facilities Savannah is well fortified. Four important railroad lines center here, giving the city direct connection with many important points inland. They are the Central of Georgia, with 1845 miles; the Seaboard Air Line, with 2612 miles; the Atlantic Coast Line, with 4034 miles; the Southern, with 7139 miles; total, 15,630 miles. These roads traverse 10 States—Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Missouri, Kentucky, Tennessee—bringing into direct communication with this city a population of 16,000,000. All these are growing States, with great natural resources, as yet largely undeveloped, and will be the originating point of ever-increasing millions of tons of freight to be carried out to the markets of the world, as well as the consuming territory for other growing millions of tons that must be gathered from the world's centers of productive activity and carried in.

Thus these roads are gathering phosphate rock, cotton, fruits and vegetables, iron, steel, coal and canned goods from the immediately surrounding States; grain products and packing-house products from Michigan, Ohio, Indiana, Illinois, Missouri, Nebraska, Kansas and Oklahoma; groceries and provisions from Cincinnati, Chicago, St. Louis, Kansas City and Omaha, and bringing them here to be shipped to numerous foreign ports.

All the roads have fine terminal facilities here, so that freight can be transferred to vessels or sent to stores and warehouses at the least possible cost and with the utmost convenience. All told, there are

eight miles of wharfage, and ocean vessels are brought into slips right alongside the railroad tracks, there to discharge or take on cargo with ease and expedition.

In steamship lines this port has the Churchill, to Liverpool, Manchester and continental points; Southern Shipping Co., principally to Rotterdam; Williamson & Rauers, to Bremen; Austro-American Line, to Mediterranean points; North German Lloyd Line, to Bremen; Merchants & Miners' Line, to Northern cities; Ocean Steamship Co., to Northern cities; Strachan Line, to points all over the world; South Atlantic Line. In addition to these there are steamboat lines to Augusta and other Savannah river points, to Beaufort and Bluffton, S. C., and a number of other river and coast places.

One of the things that claim the attention of the enterprising men of Savannah is the extension of the city's trade to keep pace with the opening of new lines of transportation. For these men, wise in their generation, and building for the future, realize the fact that shipping lines often become matters of fixed habit, and they are determined to teach the people within their transportation radius the Savannah habit.

But while thus active in building up their city in a material way, the people of Savannah have in no wise neglected the social side of life, nor the cultivation of those esthetic tastes which enhance its enjoyment. It is pre-eminently "The City Beautiful," with lovely parks, in which stand stately monuments and handsome memorial statues, with art treasures abounding in the Telfair art gallery, and literary gems bound in the 25,000 volumes that are housed in the public library. The public schools are the pride of the city, and the course of study is being so broadened and filled out that a diploma from

the high school opens the door of trial and opportunity to its bearer in any line of endeavor he may choose. In the city and county 8000 children take advantage of the means of education provided by the annual expenditure of \$160,000 provided by the taxes of the people. There are also many private schools in the city, some of the highest repute for efficiency and thoroughness.

The streets are well paved; the water, drawn from artesian wells, is absolutely pure and wholesome; taxes are moderate, and the public funds have been so expended that the city has solid value in return for the money paid out. Delightful drives radiate in every direction inland, and the country roads are of such excellence that automobilism has become the favorite means of locomotion, as well as one of the most popular pastimes among those able to afford its enjoyment. A movement is now afoot to secure the greatest automobile racing event—the Vanderbilt cup race—for Savannah, the promoters claiming that this city offers advantages of roads and scenic environment not equaled elsewhere.

The street-railway system has been brought up to a high standard of efficiency, the extent now being 58 miles, with 100 cars in use and 350 men employed. Cars run to every part of the city and to many points outside.

In all this is seen and recognized the enterprising spirit of the men who make the town, and who are determined to make the best one possible from the excellent material at hand.

It is a great game, this city-building, and the people of Savannah are playing it to the limit, overlooking no trick that is possible for them to take.

GEORGE BYRNE.

## BUSY AT BRUNSWICK.

### The Georgia Seaport's Bid for Trade and Commerce

[Special Correspondence Manufacturers' Record.]

Brunswick, Ga., December 14.

Of the Southern coast cities now bidding for business on a large scale and preparing to furnish every facility for its ready and economical handling when it is secured, none shows more determination or seems to offer better opportunities than Brunswick. It has what was almost a complete natural harbor, which, with small expenditures by the Government, has been made into one of great excellence, and is now being further improved so that vessels of 30-foot draft can come in over the bar and lie at safe anchorage. The Government engineers, indeed, say of this harbor that the cost of improvements and maintenance will be less than for any other harbor of equal excellence on the Atlantic seaboard.

To meet and complete these advantages of water transportation three railroads—the Atlanta, Birmingham & Atlantic, the Southern and the Seaboard Air Line—come in here, furnishing the necessary outlet inland and bringing Brunswick within easy reach of many of the most important freight-producing sections and manufacturing points in the South and West.

Some years ago the Southern road built on Turtle river, at the northern end of the city, large and commodious docks, where oceangoing vessels take and discharge cargo, and over which many thousands of tons of freight have passed in and out. There is 1600 feet of dock frontage there, and the facilities for handling freight, and especially cotton, are excellent.

The Seaboard Air Line has its terminals along the water-front of the main part of

the city for several thousand feet, and numerous ships may be seen loading and unloading there on any day of any month in the year.

These things have been here for some years, and have proved the means of bringing much shipping business and general trade to this port. But overshadowing the terminals of both these roads in size, completeness and equipment for handling freight between railroad car and steamship are the great terminals of the Atlanta, Birmingham & Atlantic road, lying at the south end of the city, and now almost completed. In some respects, indeed, these terminal facilities are said to stand peerless in all the ports of all the countries of the world.

The ground occupied is about 150 acres. It was marsh land, lying about even with the surface of the water at high tide. The entire surface has been or will be raised seven feet by filling in with the dirt dug from excavations for foundations and the 1,500,000 cubic yards of sand pumped from the great slip or basin which is being cut by a suction dredge to a depth of 23 feet at low tide.

There are two piers, one 500 feet long by 140 feet in width, the other 800x140 feet. These piers are built on 2400 reinforced concrete piles 18x18 inches square by 50 feet long. A depressed track runs through the center of each pier, bringing the platforms of the cars to be loaded or unloaded to a level with the decking of the piers. Docking room is provided for 20 ordinary tramp ships such as visit these Southern ports.

The big basin has been formed by driving down a solid wall of concrete sheet piling 18x18 inches and 41 feet long, tongue and grooved. In this way the sides and closed end of the basin, 250x1700 feet, have been formed, the bottom being dredged out, as mentioned above, by a suction dredge that carries the sand hundreds of feet away to fill up the marsh and form a solid foundation for the railroad yards. More than 2400 of these great piles were used in forming the basin walls. On the side next the water the concrete is protected from contact with vessels by wooden fenders, and landward it is braced by wooden piling, which will be floored over to a width of 100 feet for lumber docks on one side and for cotton warehouses on the other.

In addition to the concrete piling mentioned above, 1100 pieces 8x14 inches and 24 feet long have been used at the head of the docks on the north side of the basin.

A coal pier 300 feet long, with elevated tracks and equipped with the necessary pockets and swinging chutes, has been provided for coaling vessels. It is expected that the handling of coal will be a considerable feature of the business of the Atlanta, Birmingham & Atlantic road in the near future. But of that more anon.

There are among the equipment of these terminals four warehouses, 70x400 feet each, in addition to the cotton warehouses yet to be built; a power-house of brick and steel construction, 40x125 feet in area; an electric-lighting plant, a 40-ton ice plant and a full equipment of fire-fighting apparatus, with two pumps of 2000 gallons per minute capacity each, all now at work or standing ready to do their work when called upon in an emergency. In the matter of fire protection these terminals are said by insurance men to be unrivaled among their kind. In addition to the two pumps, with 24-inch suction pipe, there is a large reservoir always full of water, and through all the buildings, sheds and piers an automatic sprinkling system has been installed, reinforced by a hydrant system with monitor nozzles. The property is lighted by 177 arc lights and 1000 incandescent lights.

In the yards when completed there will be 12 miles of track so arranged that cars can be readily transferred from any part of the yards to any pier.

The contract for this work was let to the Fore River Shipbuilding Co., which sublet it to A. T. Chapman of Buffalo, N. Y., and W. F. Miller of Boston, the latter doing the concrete work. M. M. Cannon, engineer for the Fore River Company, planned the concrete piling, which is said to be the most extensive scheme for that character of work ever carried out in any country. Practical men from all over the United States have come to see the work, and have universally pronounced it the most economical plan ever devised for building docks. It is expected that its successful inauguration here will revolutionize the business.

In addition to these terminals, which will cost when completed about \$2,000,000, the Atlanta, Birmingham & Atlantic road has recently built handsome passenger and freight stations. These structures are of ornamental brick, with tile roofs, and present a striking and attractive appearance. The company has also purchased the famous Oglethorpe Hotel, a famous hostelry built some 15 or 20 years ago. This building has been renovated, remodeled and newly furnished throughout, put under new management and made one of the most attractive caravansaries in the South. It represents an outlay by the company of almost \$250,000. The point in these vast expenditures by the railroad lies, so far as the city of Brunswick is concerned, in the fact that it will take an immense



amount of business through this port to make a fair return upon the investment, and if the railroad does sufficient business to make it profitable, then the city must reap a large benefit both in population and in increase of permanent money circulation. From mere outward appearances, and without knowing anything of the inside affairs of the railroad, I have been impressed with the power of the company to originate by its own efforts—or through its allied interests—an immense amount of traffic to be handled through this port. The road runs from this place northwest to Atlanta and Birmingham, the former of which places it will enter within a few days, the latter in the spring or early summer. Mr. H. M. Atkinson, president of the road, resides in Atlanta, has large interests there, and is in position to influence a great deal of business for his road. In Birmingham and the mining districts of Alabama the road and the men who own and control it have furnaces and mines, coal and iron ore, that will produce a large amount of freight. The coal mines so owned are now producing 1,800,000 tons of coal annually, and the output will be doubled within a short time after the road gets into the territory.

To furnish the proper water connection, both for carrying away the freight brought in by the road and for bringing in the freight to be carried away by the road, the Brunswick Steamship Co. has been organized, backed by the same capital that is behind the road, and has established a line of steamers to New York and other important ports. New ships are being built and put in commission as rapidly as necessary to meet the requirements of an ever-growing business.

It must not be supposed, however, that the business through the port of Brunswick is all in the future. Already there is a large shipping business done here, and in the matter of shipping railroad ties this port holds first place among all seaports. In 1906 the ties shipped from here aggregated 3,112,906, and those shipped up to the first of the present month were sufficient to guarantee that 1907 would go beyond 1906 by some 100,000. Of sawed lumber the amount shipped in 1907 will aggregate between 150,000,000 and 200,000,000 feet. In naval stores Brunswick stands second among the ports, while in cotton and miscellaneous articles the shipments are large. The foreign and coast-wise shipments from the port for 1906 were valued at \$33,677,341, and for 1907 will easily reach \$40,000,000. The Strachan steamship line gives Brunswick direct connection with all the important ports in the Old World, and the Clyde and Mallory lines run steamships weekly between Brunswick and New York.

Contracts have been let by the Government for the dredging of the channel to a depth of 30 feet on the bar, and for a general depth of 30 feet in the inner harbor. The harbor is landlocked, and, in the words of Captain Johannessen, harbor statistician, "when a ship comes in through the channel, passing Jekyll Island on one side and St. Simon on the other, it is just like a man coming in the house and shutting the door—he is safe from any storm."

While agricultural pursuits have not been prosecuted in the territory contiguous to Brunswick as in other sections of the State, it is not for lack of fertility of soil, but rather because the attention of the people has been more strongly attracted to other things. In common with the lands of other portions of this coast country, those of Glynn county and its immediate neighbors offer many advantages to meet the efforts of the husbandman and to culminate with them in a profitable industry. Experiments recently made on a scale of

some magnitude and by the adoption of scientific methods have demonstrated the adaptability of soil and climate hereabout to the successful growing of truck, as well as general agriculture, and will doubtless prove the beginning of most important trucking enterprises. A rice farm some five or six miles from the city was cultivated this year by Japanese experts, and responded most profitably to the touch of their intelligent effort.

The general business of Brunswick is good, and it has more the appearance of a city of 25,000 people than of one of 15,000, which is about its real size. Its stores are large, well stocked and modern in appearance; its banks are strong and its banking capital equal to the demands of its business; its public buildings are large, and of great architectural beauty. The sewer system, planned by the late Col. George E. Waring of New York, is designed for a city of 50,000 inhabitants, and the city's water is secured from a system of artesian wells sunk far below all danger from surface drainage. The streets are broad and

beautiful, those in the residence section being bordered by stately live oaks and other trees that render them most attractive. The climate is delightful, being as equable as at any other point on the Atlantic coast, never very cold in winter, and with a breeze from the open sea that cools the heat of summer to a comfortable degree. Jekyll Island, home of the richest club in America, lies only four or five miles from the city, and Cumberland Island, the winter home of the Carnegies, is but a few miles further down the coast. These two islands have been made the beautyspots of the Atlantic seaboard by the wealthy people who seek the most healthful climate in which to spend their weeks of winter recreation, and who can afford to choose that which most completely fills their requirements.

Fish of all kinds abound in the waters, and game is plentiful in the forests, and the elements necessary for the happy existence of man and the fulfillment of his noblest ambitions seem to meet and mingle here in fullest measure. GEO. BYRNE.

## FERNANDINA'S HARBOR.

### A Large Territory to Be Benefited by Its Improvement.

[Special Correspondence Manufacturers' Record.]

Fernandina, Fla., December 13.

Fair Fernandina, lying on the northern end of Amelia Island, and at the basin formed by nature where St. Mary's river flows into Cumberland Sound, is one of the oldest, loveliest and most picturesque cities on the Atlantic coast, as well as one of the most promising commercial points in the entire Southern country. The natural excellence of the harbor here was recognized by the earliest European visitors, and from 1513, almost 400 years, it has been the chief port not only for Florida, but for a large scope of other country as well. The entrance to the harbor is through Cumberland Sound, between the northern end of Amelia and the southern end of Cumberland Islands, and the Government, adding its touch to what nature had already accomplished, built out jetties from the points of the two islands, confining the current sweeping outward to a narrow channel, causing it to cut away the bar, giving a channel sufficient in depth for the passage of vessels of 24-foot draft at low tide, and of 30-foot draft at high tide. Further work is being done by the Government, and when it is completed there will be a depth of 35 feet throughout the entire harbor, with from 45 to 60 feet in the main channel. The money expended and to be expended will aggregate \$3,000,000, and the work has been so planned and executed as to bring about the best permanent results. The expanse of the harbor is sufficient and the holding bottom of proper quality for the safe land-locked anchorage of a large number of vessels.

Not only Fernandina itself, but a very large tributary territory, will reap an immense advantage from this great harbor, because no matter with what justice the harbors to the north may urge their advantages, there is none on the coast to the south that can even claim to approach it, and a large area of rapidly-developing country finds its easiest outlet to the world's markets through this place. The further claim is made for Fernandina that it is the most accessible port on the entire coast for West Indian, South and Central American trade, and that it will benefit largely from the increase of traffic with those countries, and that which must come from the completion of the Panama canal.

Through this port the chief products of the entire State of Florida find outlet to market in their largest quantity, and in the matter of distributing naval stores,

lumber, cotton, railroad ties and phosphate it holds an important position among the ports of the world. The European and South American markets depend largely upon Fernandina for pitch pine and cypress lumber and for cypress shingles, of which large shipments are made annually. The claim is made that for rates of freight, marine insurance, pilotage and towage and other port charges Fernandina offers peculiarly attractive terms, while the facilities for taking on and discharging cargo are such as to admit of the quick dispatch of all classes of ships.

So much for the seagoing advantages offered here. Inland the traffic must be done over one road, the Seaboard Air Line, for it is the only one now running into the city. But one railroad can do much to build a town when so disposed, and the Seaboard has done and is doing a great deal for this. Its terminals are commodious and convenient, and plans have been matured for their increase in size and convenience in the near future. A fertilizer elevator belonging to the road, which was recently destroyed by fire, is to be replaced at once with one of greater capacity and equipped with all modern arrangements for the handling of that important article of commerce.

Other railroads now having their tracks within a comparatively short distance of the city have planned to build here to secure deep-water terminals, and it must in the nature of modern business methods be but a short time before Fernandina is entered by two or three more trunk lines.

The leading citizens of the place, recognizing the fact that cities to be built in the twentieth century must offer a combination of natural advantages and enterprising public spirit, have organized a board of trade with the object not only to let it be known what opportunities their city offers in the way of transportation and other facilities, but to make it known also that these things will be supplemented, in the case of worthy industrial institutions, with free sites and reasonable stock subscriptions. Special inducements are offered to concerns engaged in the manufacture of railroad freight cars, boxes of all kinds, sash, doors and blinds, furniture, spokes, hubs, barrels, wagons, and, in fact, woodworking plants of all kinds. Yellow pine, magnolia, oak, cypress, red bay and many other kinds of wood of high commercial value are obtainable here at the low-

est possible price, and it is believed that plants engaged in the manufacture of such articles as can be made from them must prove successful when properly managed.

A plan already mapped out and about to be put into execution promises to throw upon Fernandina the spotlight of public attention in another line, and one that must prove of immense benefit to the entire community. The many private gardens in and about the city, by prolific yield of all kinds of vegetables, furnish indubitable proof of the fertility of the soil and the suitability of the climate for the production of all sorts of edible vegetation. Years ago an old sea captain, weary of his vocation of many years, bought property on Amelia Island and reaped great profit from the growing of vegetables for market. After his death the business was allowed to perish, and nobody has revived it. But with the lessons of the many kitchen gardens and this public truck farm before them, and the knowledge of what is being accomplished elsewhere throughout the State and in other sections of the coast country, the people of Fernandina are waking to their opportunities, and there is promise that the entire island will in a few years present the appearance of an immense garden. The plan mentioned above, which is relied upon to bring about the awakening, is the reclamation of a large area of marsh lands, beginning about the northern end of the city and extending for a considerable distance in a southeasterly direction. The surface of the marsh is about even with the water at high tide, making the chief thing to be done the construction of a dam that will keep the tide from flowing in upon it. The entrance to the marsh from the harbor is through a narrow neck, and a dam 1000 feet in length will be sufficient to reclaim the entire tract. It will be drained by a large central canal and a number of lateral ditches, and it is understood the natural fall is sufficient to carry the water off at low tide. Marsh lands are very fertile when properly drained, and it is thought this will prove one of the most profitable trucking propositions in the entire South. Major Cassius E. Gillette is the leading spirit in the enterprise.

If this plan is carried to successful consummation it will undoubtedly inspire others to engage in the trucking business, for the soil of the entire island, while not averaging of as high fertility as that of the marsh lands, is well adapted to the cultivation of truck and can be made to yield handsome profits when intelligently cultivated. Lettuce, celery, cabbage, onions, spinach, kale, potatoes, turnips, snap beans, eggplant, cauliflower, melons, berries—in short, all the multiplicity of things that are profitably produced in the Norfolk-Portsmouth, the Wilmington, the Charleston or other coastal truck regions, can be made here to yield profits to those who diligently plant and intelligently cultivate. And with the right kind of attention paid to seasonable planting every month in the year will be a crop month.

Fernandina offers many allurements as a home city. With lovely homes, good schools, handsome churches and a population highly educated and gently refined, there is no city in which the finer things of life are held in higher esteem, or where moral worth and intellectual merit are more quickly received at their true value. The city is well governed, the sewerage system is perfect, the water pure and plentiful, and there is little wanting to make life here ideally pleasant. The workman who depends upon his labor at an average wage to feed himself and family can easily live here in a manner that would be considered luxurious in other places and still lay up something against the day when "old age comes creeping on."

GEO. BYRNE.

# CURRENT EVENTS AS VIEWED BY OTHERS

## LESSON IN IMMIGRATION.

[Augusta Chronicle.]

There arrived in Augusta yesterday 12 able-bodied Austrians looking for work.

They are a part of a cargo of 750 immigrants that are being intelligently and systematically distributed throughout the South.

The ship on which they came landed 250 of these immigrants in Savannah Wednesday, and the others were sent on to New Orleans. Of the 250 allotted to Georgia, 12 were sent to Augusta.

As an object-lesson, first of all, of how sadly lacking is Georgia's facilities for encouraging and handling the right sort of immigration, these 12 Austrians were sent to Augusta "consigned" to an individual citizen—and he was expected to provide quarters and find employment for them on short notice.

Once more the Augusta Chamber of Commerce was given an opportunity to render a valuable service to the community, and as soon as notified Secretary Moore took charge of Augusta's first party of immigrants, provided them with meals and sleeping quarters, and before night was in communication with a number of parties who are in need of just such labor. Within an hour after their arrival one of their number had found a home and employment, and the others will be placed forthwith. There is work, and plenty of it, for all of them to do, and many more like them.

But right here is furnished an object-lesson in immigration, as well as in Southern labor conditions. Read it and ponder it well:

For an hour or more yesterday these dozen able-bodied, clear-eyed, well-featured Austrians were huddled together in the Augusta depot while Secretary Moore of the Chamber of Commerce was making arrangements to have them cared for. There they were, 12 new citizens for this great free republic. They had traveled thousands of miles and crossed the seas to reach this haven of hope. Some of them had left wives and little children in Austria while they went out to the New World seeking work—eager to better conditions for themselves and their little families.

The optimism that shone in their faces was in itself an inspiration. They were full of hope and a willingness to work. But where was the work? Would it be forthcoming, or had they crossed the seas and come as strangers into a strange land for nothing? Who can say what conflicting emotions possessed them—and yet their faces shone with hope.

But would there be work for them? There they stood, unknown to everyone about them, unable even to speak the language of the country, but able-bodied and willing.

Finally, they were led from the depot across Campbell street to a restaurant, where they were given a wholesome dinner. In going they had to pass through a crowd of 200 or perhaps 300 negroes—idle negroes. Not all of them professional loafers, to be sure, but for the time being, and for the day or for several days perhaps, idle. Many of their number, doubtless, would scorn to work more than one or two days a week. Many of them were drunken, rowdy negroes—worthless citizens in every sense of the term.

There they were, enough of these idle negroes to do the work of all those 250 Austrians who were landed in Georgia Wednesday. And yet the dozen Austrians

who arrived in Augusta yesterday will in all probability do more work and better work in the course of the coming year than all of the 200 or 300 negroes gathered about that depot and lining Campbell street yesterday.

Who can doubt this statement? To have seen these eager Austrians and those idle negroes yesterday would have left no room for doubt. There they were; these 12 able-bodied Austrians seeking work; those 200 or 300 idle negroes shunning work.

How can the South hesitate in the face of such conditions as these—in the face of such an object-lesson as this? The longer we neglect the opportunities that are open to us in this direction, the more cause will we have to regret it—the slower will be our progress. Who can deny it?

## REACTION OR SANITY?

[Hattiesburg (Miss.) News.]

Happy the man and happy the State that can profit by the experience of others! What benefit has Alabama, Georgia and other States derived from this railroad agitation? It may be summed up as follows:

1. Capital will for many years decline to invest in railroad construction within those States. This means that sections at present undeveloped will be held unprofitable and perhaps a burden to the more prosperous parts.

2. The animosity manifested toward railroads will be cordially reciprocated. That is a part of human nature which even soulless corporations share. No favor will be granted unless under compulsion. Under these conditions co-operation is impossible.

3. The railroad legislation will be fought by the corporations until finally decided by the United States Supreme Court. Lawsuits of this kind involve heavy expenses, which the taxpayers must defray. No Southern State has as yet reached the stage of prosperity when it is able to indulge in such luxuries. The money would be spent to better advantage upon the necessary State institutions, and if not needed there, in increasing official salaries.

This State needs railroads, as many as it can secure, and if any such road renders productive a section which is in the first stage of its development it is entitled to share in the prosperity created by it. If that principle is accepted and maintained, Mississippi will suffer little from the action of the adjacent States.

We have the resources; there is no question about it. But so long as these resources must remain undeveloped, owing to the impossibility of sending them to a market, the taxpayers must bear the burden of undeveloped wealth.

## FOR THE WATERWAYS.

[Minneapolis Journal.]

What do the business men of Minneapolis and the Northwest think about improvement of the Mississippi for a commercial waterway?

The MANUFACTURERS' RECORD of Baltimore, one of the leading trade publications of the country, wants to know. It is starting a campaign to get from Congress adequate appropriations for river improvement, and for this purpose wants to bring all the concerted pressure possible to bear on the Senators and Representatives at Washington.

A. L. Crocker, Minneapolis member of the executive committee of the Upper Mississippi River Improvement Association,

has been asked by the MANUFACTURERS' RECORD for the attitude of the Northwest, and he wants to secure expressions from as many people as possible to show that this section of the country is heartily interested in the project. Mr. Crocker said today:

"The twin cities have a leading and special interest in this matter. Shall we who are now in active life share in the benefits of cheapened freight rates and consequent business development, or shall we treat the matter as an academic question relating not to us, but to those who follow us? It is for the business men to decide this and to direct Congress what to do, and Congress will do what it is told to do.

"No paper in the United States stands higher for sound, reliable judgment on the business questions of the country than the MANUFACTURERS' RECORD of Baltimore. In a recent correspondence with its editorial department they ask what the Northwest thinks is the best way to deal with the waterways business. I therefore appeal to the shipper and producer and the business men of the Northwest to send their written expressions of opinion direct to me, 314-315 National Bank of Commerce Building, Minneapolis, Minn., at their earliest convenience, that those views may be forwarded to our members in Congress and so secure the earliest congressional consideration. A summary of these expressions is asked for by the MANUFACTURERS' RECORD, that the rest of the country may know what the Northwest thinks and wants."

## THE TEXTILE SITUATION.

[Boston Herald.]

The *Textile World Record* contains an interesting study of the situation in the textile industry of the country, exhibiting conditions that are sound and encouraging. Letters from millowners in the various textile lines, received in response to inquiry as to existing conditions, show that the situation is generally normal; that the mills, with few exceptions, are in full operation, and that collections are as usual and wage payments are being made in currency. The *Record* say that the market for textile goods is under better control than for years; that the manufacturers are in command of the situation, with no accumulation of goods, and their mechanical and financial organization in better shape than ever before. Of further interest is the report of mill construction for the past year, which is not quite equal to that of 1906. It is significant that there has been no overexpansion in this industry, which fact accounts for the brief period of relaxation in the mills, nearly the entire textile industry having already resumed full operations. The *Textile Record* is performing a distinct service for the general business situation in its thorough investigation and exposition of conditions in its particular line of industry. The prophets of evil have been crying that there has been overexpansion of industry, as there had been overexpansion, and the warning has been given that there must be as severe a period of recovery to the normal level as has been experienced in the stock market. Fear of this predicted business depression aggravated the recent money stringency, and this same fear is now handicapping the progress of recovery. But here is one of the great industries of the country shown to be on a safe and sound footing. It has no accumulation of manufactured stock in the market; it has not created productive capacity beyond

its needs, which must now lie idle. The industry is in better shape than ever before, and can find good and profitable use for all its resources. Other trade journals would do well to make similar inquiry into their respective lines. The situation will be found to vary but little all along the line.

## THE NATION IN BUSINESS.

[Florida Times-Union.]

While the people are debating whether the Government shall own or operate "public utilities," and while Congress is considering the question, it will be news to a majority of us that Uncle Sam has gone right ahead as supreme ruler of territories and dependencies to make a record. These achievements would not be so important to us if it were not now proposed that he impose like "improvements and conveniences" on us. He is asking that we turn over the savings banks to his postal system; he is looking after our eating and drinking, and he may ask that one inspector be seated among the directors of every national bank. There are other duties he asks permission to perform, and we may as well face the question.

He has built, he owns and he is operating a cable and telegraph system—the Washington-Alaska. In length this would reach from Newfoundland to Ireland if placed on the other coast! How is that for telegraph operator? The commercial tolls on this line amount to \$10,000 a month, and he says in his advertisement of rates that he serves the public at four-fifths lower rates than his competitors.

He has bought and owns and operates an important railroad—that connecting the two oceans across the Panama strip.

He has an ocean steamship line from New York to Panama, and asks for freight and passengers in the regular way.

In the Philippines he has a savings bank run by the Postal Department and pays interest on all deposits, guaranteeing by the faith of the Government that cash will never run short.

In 13 of the Philippine cities Uncle Sam runs slaughter-houses, and has a monopoly of that business for 10,000,000 people—something better than the one he fought in Chicago, for competition is impossible, deficiencies being made good by taxation.

It is not only at Hot Springs that the Government is running a health resort; it has a splendid one in the Philippines also, where it is regularly in the hotel business.

He has telegraph and telephone lines in Porto Rico; he runs a big newspaper in Manila and in the Panama zone.

But the greatest growth in means and authority is shown in the Forestry Bureau. Nine years ago he had an appropriation of \$28,500 for this department and employed 11 men. Now he has an appropriation of \$3,100,000 a year and employs 1400 men, while insisting that Germany, under the same system and the like cares, would employ 200,000! Is he to ask for this army? He recommends the German system. Why talk about our "progress toward socialism?" Haven't we reached it, and only need time for the growth? Why talk about "the dangers of imperialism?" Are we not suffering from them today—or enjoying their fruits? If the nation can do all these things in the territories and dependencies with a profit, why not here? If we surrendered all our franchises to Uncle Sam, would we have any taxes to pay? Could the newspaper fight a Government organ? Could a corporation fight a Government railroad or telegraph system?



The West complains that a hunter must wire to Washington before he can make a fire to broil his bacon, but he is told to do without the fire and stay at home. Why not tell the rest of us something like that?

#### TO MAKE A GARDEN.

[Houston Chronicle.]

The convention called by the Jefferson County Drainage Association, by which it is proposed to enlist the co-operation of every community along the Gulf coast of Texas, to the end that the southern section of the State may be lifted from the mud, has been announced for January 14 and 15 at Beaumont. On Thursday Mr. J. A. Arnold, president of the State Association of Commercial Clubs, and secretary of the Beaumont Chamber of Commerce, was in Houston to further discuss the matter with Secretary George Brown of the Business League and others interested in the project.

It is proposed to call upon all the commercial organizations in the section, all commissioners' courts in the various counties and all mayors of different cities to select delegates to participate in the deliberation. The end and aim of the meeting is to stimulate interest to the organization of drainage districts under the new law, that swamps may be drained, low places be transformed into gardens and the rich alluvial soil of the coast country be made susceptible to cultivation.

In the words of Mr. Arnold, it is proposed to so arrange that the present breeding place of the festive mosquito and malaria germ be turned into a place for human habitation. By the digging of ditches and the removal of obstruction to the natural courses of drainage it is planned to provide insurance against sour land, ill-health and inconvenience, thus removing the last handicap placed upon some sections of the coast country.

Under the Griggs law as passed by the last Legislature this is made possible, and already in Jefferson county active steps are being taken to reap the benefit afforded

#### ON SELLING COTTON.

[Galveston (Texas) News.]

The News advises farmers not to ship their cotton to foreign ports to be held in storage there and finally sold by agents of whom they know little and to buyers of whom they know less. In the first place, the man who thus ships his cotton loses control of same and cannot have it disposed of in a satisfactory manner by means of the long distance communication upon which he will have to depend. In the second place, the charges are quite sure to eat a large hole in every bale, and, in addition to its being far beyond his reach, the shipper will have to bear all the risks.

The News could present quite a list of names of farmers who have shipped cotton abroad, and who have found this plan wholly unsatisfactory. In some instances the losses coming of it have been appalling. It is quite in order for buyers of hundreds of thousands of bales, who know the ropes, to ship their stock to its place of destination and there tempt the spinners with it if they prefer to do so. For the man with a few bales to betake himself to any such plan is an entirely different thing. The News advises him to sell his cotton in some good Texas market, and, all things being equal, in his home city or town.

#### LOOKS CONFISCATORY.

[Albany Evening Journal.]

According to statements from railroads that operate lines in Pennsylvania, the uniform effect of the two-cent-fare law in that State has been to cause loss to the companies.

The Pennsylvania Railroad Co. directs

attention to the fact that its October statement of earnings shows for lines within the State a decrease of \$64,900, while for lines outside the State a large increase is shown.

It states that the percentage of increase shown for outside lines would make an increase of \$140,000 for lines within the State, so that on the face of the October report the company has sustained a loss of \$204,000 by reason of the operation of the two-cent law.

"This decrease in revenue," the company says, "is absolute, and has not been offset in any manner by increased travel stimulated by the reduction in the rate per mile." It adds that the figures cover only the loss in gross earnings; that the decrease in revenue is still greater on account of the increased cost of operation due to advances in wages and cost of maintenance.

It appears, then, that it is not the rule that increased travel is an offset to decreased rates of fare. Such a condition was recently shown in another State, and some may have jumped from that showing to the conclusion that a two-cent-fare law would not work hardship anywhere.

This statement of the Pennsylvania is evidence to the contrary, and it is corroborated by similar declarations from the Reading, the Lehigh Valley, Central Railroad of New Jersey, Baltimore & Ohio and other railroads operating in the State of Pennsylvania.

#### CHEAP RECLAMATION.

##### Results of Subirrigation in Southern Louisiana.

[Special Cor. Manufacturers' Record.]  
New Orleans, La., December 13.

The subirrigation of the wet prairies of South Louisiana is one of the most valuable phases of land reclamation in the South. Here is land level, without tree or stump, rich beyond description, with the fresh water for irrigation just under the surface. Instead of having in this favored section to build great dams and storage reservoirs and basins, the earth itself is a well-filled basin. Instead of having to raise the water for irrigation many feet at a great expense, one has simply to raise it three, four or six feet at most. If one needs it for crops, one has only to pump the water out of the canals, which are the drains, onto your land, and there is the finest, most reliable and cheapest irrigation.

With a rainfall averaging 55 inches a year, if there comes a month or two of drouth the same pump used to pump the canals and ditches down to a water table as desired will now pump the water out of the canals onto the land for the crops that need it.

Suppose a Sangamon county (Illinois) farmer had on his farm conditions of soil, certainty of season, which without unusual effort permitted him to make net \$100 per acre a year, what would his farm be worth? Sangamon county, Illinois, is not more healthful than St. Charles parish, Louisiana, and the climate is not as pleasant.

On the Gheens plantation near Des Allemands they have been harvesting sugar-cane which is yielding from 40 to 60 tons of cane to the acre, and the price is \$3.75 per ton. This is the second crop from one planting. They will get two more crops from this planting on drained wet prairie land. It cost about \$20 per acre to drain the land and \$30 per acre to grow the crop.

Ninety per cent. of the tenants on this place are white. There are between 600 and 700 people, tenants and laborers, on this plantation, and no sickness and no doctor.

## TEXTILES

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the MANUFACTURERS' RECORD. We shall be glad to have such matters at all times, and also to have any general discussion relating to cotton matters.

#### Cotton Mills and the Stringency.

Mr. S. B. Tanner of Carolcen, N. C., in a circular-letter to the members of the American Cotton Manufacturers' Association, of which he is president, says:

"I have had a number of requests to call a meeting of the association for the purpose of arranging a curtailment in production until such time as the trade will again take the output of the mills, but upon making inquiry I find it will be impossible to get any concert of action at this time, for the reason that some of the mills are sold ahead to dates ranging from January to July, while others are practically up with their orders now, and some few may have small accumulations. Consequently, the management of each mill will be compelled to use its own judgment in regard to restricting production. It will no doubt be much better for each mill to restrict its own output to the actual demand for its particular product."

President Tanner enlarges upon that point, and adds:

"It seems now that confidence, the loss of which has been the principal trouble in this panic, is gradually gaining ground, and there was really no good reason for it, as the trade of the country was never in better condition than it was when the panic came on. This is a point which inspires hope in the future, as all other panics found the country in distress, for the reason that, after months of idleness, the laboring people had no purchasing power. There is no need now for weak mills to sacrifice their goods, nor for charity on the part of those who have a surplus, as the country is still in a flourishing condition. The consumers are getting good pay, and are amply able to pay fair prices for their requirements, and they do not ask for low prices, which mean reduced wages and loss to the mills."

#### The Ball Ground Cotton Mills.

In October the MANUFACTURERS' RECORD mentioned that A. J. Lovelady of Ball Ground, Ga., was interested in a plan for forming a mill company. He has now effected formal organization as the Ball Ground Cotton Mills, with the following officers: President, A. J. Lovelady; vice-president, C. M. Wofford, and general manager, Frederick A. Abbott. The company has begun grading, preparatory to laying concrete foundations for the buildings, which will include the main structure, 75x320 feet, two stories high, with dormer roof; picker-room, 32x75 feet; dyehouse, 75x90 feet; engine and boiler rooms, each 40x40 feet. The machinery has not been contracted for, but will be given consideration in January. It will include 10,000 spindles and 200 looms, the product to be 2.40 indigo denims or 2.40 drills or eight-ounce duck, according to market conditions when the plant is completed. About 275 operatives will be employed.

#### The Dixie Cotton Mills.

Some months ago the MANUFACTURERS' RECORD presented the principal details of the organization of the Dixie Cotton Mills of Mooresville, N. C., the company being capitalized at \$100,000 and intending to install 5000 spindles for manufacturing

yarns. Further particulars are that the mill building is two stories high, 100x100 feet, the first floor to contain the carding-room and the second floor the spinning-room. The picker building is one story, 27x100 feet; the dyehouse is 30x100 feet. About \$35,000 is the cost of the buildings. The machinery will include 5000 spinning spindles and 2400 twister spindles for manufacturing 24s to 30s single or ply cotton yarns, the daily capacity being 1100 pounds. All contracts for machinery have been awarded, and amount to about \$44,000. In full operation the plant will employ 35 operatives. Sylvester Denney is the architect in charge, and E. W. Brawley is the company's president.

#### The Delburg Cotton Mills.

The Delburg Cotton Mills of Davidson, N. C., is planning to determine all details and proceed with the construction and equipment of its proposed cotton factory. This company was mentioned in the MANUFACTURERS' RECORD of July 25 as organized with capital stock of \$100,000 and intending to build a plant of 2500 spindles for manufacturing 12s to 20s cotton yarns. J. P. Munroe is president, and F. J. Knox, secretary-treasurer.

#### Sargeant Cotton Manufacturing Co.

The Sargeant Cotton Manufacturing Co. of Charlotte, N. C., has been incorporated with a capital stock of \$50,000 by Edward L. Sargeant and J. M. Harry. Organization will be effected soon, and details of plant will be decided. Mr. Sargeant has been previously referred to as proposing the erection of a 5000-spindle yarn mill.

#### Proposes to Install Modern Spindles.

The Laurel Bluff Cotton Mills of Mt. Airy, N. C., contemplates installing 2000 modern spindles to replace old equipment, the product to be 14s to 24s cotton yarns. J. L. Brown, proprietor of the enterprise, is now prepared to correspond with manufacturers of textile machinery with a view to contracting for the new spinning equipment.

#### Will Build Knitting Mill.

L. W. Redd of Lexington, S. C., will build a knitting mill, the equipment of machinery to include from 30 to 50 knitting machines.

#### Textile Notes.

It is reported that Thomas Upton of Madisonville, Tenn., is organizing a company, to have a capital stock of \$15,000, for building a knitting mill.

T. L. Foreman will establish the Dixie Knitting Mills at North Augusta, S. C. The machinery will be driven by electricity and the product will be cotton hosiery.

The Crews Manufacturing Co. of Kernersville, N. C., is reported as to remodel its present plant, erect an additional building and install new machinery in order to largely increase the present output of woolen blankets.

#### Southern Engineers.

At its annual meeting last week at Nashville the Engineering Association of the South elected H. M. Jones of Nashville, president; H. H. Trabue of Nashville, secretary and treasurer; A. V. Goode of Atlanta, G. H. Harris of Birmingham, Arthur Pugh of Atlanta, T. P. Branch of Birmingham, Hunter McDonald, C. B. Wilson, W. H. Whorley and H. H. Trabue of Nashville, board of directors. The next annual meeting will be held at Charlotte, N. C.

The North Carolina Architectural Association will hold its semi-annual meeting at Charlotte on December 27.

## RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

### GOULDS IN VIRGINIA.

#### Fredericksburg & Southern Plan to Extend an Electric Railway.

The Fredericksburg & Southern Railway Co. is the name of a new corporation which has applied for a charter in Virginia to build a line about 40 miles long from Fredericksburg southward to Doswell, and it is proposed to connect this line with the Richmond & Chesapeake Bay Electric Railway Co., now running from Richmond to Ashland, Va., 15 miles, which latter point is only six miles from Doswell. Provision is made by which the connection between the two lines can be built. Objection has been made to the charter by the Richmond, Fredericksburg & Potomac Railroad Co., and also by the State of Virginia, which is a stockholder in that road, and the matter is now before the State Corporation Commission awaiting a decision. The objection is based on a law prohibiting the paralleling of the existing railroad.

Mr. Henry W. Anderson, vice-president and counsel of the Richmond & Chesapeake Bay Electric Railway Co., telegraphs the MANUFACTURERS' RECORD confirming the report of its interest in the line proposed thus: "Application for Fredericksburg & Southern charter is on behalf of Mr. Frank Jay Gould. It is his intention to build the road in connection with his other enterprises in this section." (Mr. Gould is president of the Richmond & Chesapeake Bay road.)

The incorporators of the new company are William C. Whitner, Rock Hill, S. C., president and engineer; E. J. Smith, vice-president; A. T. Embrey, secretary-treasurer, both of Fredericksburg. The above, with the following, constitute the board of directors for the first year: A. W. Embrey, A. P. Rowe, J. T. Lowry and C. W. Jones, all of Fredericksburg, where the headquarters will be.

According to the charter, the new road can be operated by steam, electricity or other motive power. It may also operate steamers on the Virginia waters, build electric plants, etc. In this connection it is reported that the Goulds have acquired extensive water rights on the Rappahannock river at Fredericksburg, and it is intimated that an electric power plant may be built there.

The proposition of this new road has caused a number of rumors to be circulated, the principal one being that it is designed to ultimately parallel the existing line between Richmond and Alexandria, Va., connecting there with the Washington, Alexandria & Mt. Vernon Railway, which, according to a report (not confirmed), has been acquired by friendly interests. The purpose of this rumored plan is said to be to connect with the Western Maryland Railroad, frequently of late called the Wabash because of the Goulds' interest in it and their declared purpose to some day link it with the Wabash system at Pittsburg.

Talk about a connection with the Western Maryland, however, seems to be a remote possibility. Even if the new line were built to Washington or connected through to that city, it would still be some distance from the Western Maryland, although it is possible that arrangements might be made to use some one of several plans that have been made for building between Washington and Baltimore, or else to use the Old Dominion & Great Falls Electric Railway, which it is now proposed to extend from Great Falls to Frederick, Md., whence a line is already under construction to Thurmont, Md., 15

miles, a town on the Western Maryland. It does not, however, appear that any early realization of a through route along these or similar lines is probable.

### NEW LINE IN ARKANSAS.

#### Memphis, Paris & Gulf Begins Business, and Proposes to Extend.

Mr. H. L. Rummel, president of the Mercantile Trust Co., Little Rock, Ark., writes the MANUFACTURERS' RECORD confirming the report that he has floated bonds on the Memphis, Paris & Gulf Railroad from Nashville, Howard county, Arkansas, to Ashdown, Little River county, Arkansas, 28 miles.

Continuing, Mr. Rummel writes: "This road has just been completed with 60-pound steel rails, thoroughly ballasted, and has started as a money-maker from the beginning. It had only been in operation for a little over 15 days when the following statement was rendered: Gross earnings to November 30, freight, \$2973.87; passenger, \$561.55; miscellaneous, \$75.25; total, \$3610.67.

"Carload commodities moved: 154 cars of logs, 27 of lumber, 1 of flour, 1 of machinery, 12 of cottonseed, 2 of hulls and meal, 1 of hay; total, 198 cars. From Nashville 100 bales, Mineral Springs 529 bales, Paraloma 236 bales; total, 855 bales. (The latter probably refers to shipments of cotton.)

"The road is projected to run west to Paris, Texas, and east to Memphis by way of Hot Springs. The line will be extended north this coming summer about 10 miles, and south to Richmond, Ark., a distance of about eight miles. It was built originally both as a traffic road and to handle lumber to the Nashville Lumber Co.'s plant, one of the largest plants in the South, which has been in operation only a few months.

"The work of constructing the road is being done by a construction company, and they are not in the market for any bids for construction work, as that is being done by themselves."

### SOUTHERN RAILWAY'S WORK.

#### Double Track and Extensions Completed by the Company This Year.

The Southern Railway Co., according to official information received by the MANUFACTURERS' RECORD, has completed this year and put in operation double track thus: From Linwood to Spencer, N. C., 9.6 miles; from Pomona to High Point, N. C., 12 miles; from High Point to Linwood, N. C., 22 miles. This gives a continuous double track from Greensboro to Spencer, N. C., a distance of about 47 miles. The company also completed and put in operation 11 miles of double track from Peyton to Austell, Ga. This double track was later completed and put in operation for a distance of 12.25 miles.

The following extensions have also been completed: On the Flat Top spur to a point beyond Village Creek, Ala., 4.26 miles; on the Middle Fork branch of the Big Mountain spur to the property of the Butler Coal Mining Co. in Tennessee, about three-quarters of a mile; the Woolbridge-Jellico Coal Co.'s spur from a point near Newcomb, Tenn., to coal mines, about one and one-half miles; the Bessemer Coal, Iron & Land Co. spur from milepost 1, on the Bell Ellen branch in Alabama, about three-quarters of a mile; the Stith Coal Co.'s spur, on the Ensley Southern Railroad in Alabama, about three-quarters of a mile; the Straight Creek Coal & Coke Co. and Clairfield Lumber Co.'s spur from milepost 5, on the Cumberland Railway in Tennessee, about one mile; the Tennessee-Jellico Coal Co. spur from milepost 2, on the Cumberland Railway, about half a mile; the Clear Fork Coal Co. spur from

milepost 5½, on the same road, about one mile; total, about 10½ miles.

### LARGE FREIGHT YARDS.

#### Baltimore & Ohio's New Freight Classification Terminal Is in Operation.

The Baltimore & Ohio Railroad Co. has put in operation its new classification freight yard on the main line at Brunswick, Md., about 80 miles west of Baltimore. It is three and one-half miles long, with a capacity of 3960 cars, and extends from Knoxville, on the west, to East Brunswick, where it connects with the old yard. Together these two yards make a length of six miles, with a capacity of 6400 cars. The contractors were F. H. Clements & Co. of Philadelphia, and the work was done under the supervision of D. D. Carothers, chief engineer; A. M. Kinsman, engineer of construction, and J. T. Wilson, assistant engineer, all of the Baltimore & Ohio Railroad.

The new yard is built on the hump plan, and the distribution of the cars on the various tracks is made very simple by the use of compressed air for operating switches, this method being controlled by a push-button machine in the switch tower. All that the switchman has to do is to push a button to set any switch desired. The new yard, including all subyards, will cover an area of 115 acres. It contains 40 miles of yard tracks and 12 miles of main track. It is lighted by electric arc lights, and the drainage is very thorough.

### NEW LINE INTO ATLANTA.

#### H. M. Atkinson's Road Will Soon Operate Trains from There.

The Atlanta, Birmingham & Atlantic Railway has now advanced its construction to a point within the city limits of Atlanta, Ga., this being on the branch from Manchester, Ga., a point on the main line 78 miles from Atlanta, and which makes Atlanta by this route 333 miles from the seaport of Brunswick, Ga. Construction is being pushed, and it is expected to soon be completed to the terminals in the city. Construction is also being rapidly advanced on the main line between Talladega and Birmingham, Ala. The road is built with 80-pound steel rails. It is expected that the Atlanta branch will be put in full operation for service through to Brunswick by January 1.

### Panhandle Short Line.

J. H. Ransom, president of the Panhandle Short Line Railroad, and W. A. Squires, president of the North Texas & Oklahoma Promoting Co., are quoted in a dispatch from Hereford, Texas, as saying that contracts to grade the entire line will be closed within two weeks, and it is proposed to complete and equip the road from Hereford to Stanton, Texas, 200 miles, within a year or 16 months. The line has already been graded from Hereford to Dimmitt, 20 miles, and it is proposed to complete the track on this in January. Orders have been placed for 30 miles of rails and 250,000 ties. Negotiations are under way for cars and locomotives. Hans Hellend is chief engineer.

The Panhandle Short Line, it is further said, will be eventually extended from Stanton to Aransas Pass, on the Gulf of Mexico; also from Hereford to the Trinidad coal fields and the Pueblo iron fields in Colorado, thus covering more than 1000 miles.

### Street Railway for Minden.

Mr. H. A. Davis, secretary of the Minden Progressive League, Minden, La., who, with J. B. Story, applied to the City Council for a street-railway franchise for the Minden Traction Co., writes the MANUFACTURERS' RECORD that the company will

be chartered when the city grants the franchise applied for, which will doubtless be in the near future. Continuing, he says:

"We have in mind the installation of a motor car line extending about four miles on the streets of this hustling little city. We believe that the venture will prove a paying investment from the beginning, and in view of the assured coming growth of the city we are doubly sure that it will be a financial success later.

"We want all the information we can get regarding gasoline motor cars. We expect to start off in a modest way and to add equipment later as business justifies."

### Railroads in Kentucky.

The twenty-eighth annual report of the Kentucky Railroad Commission, covering the fiscal year ended June 30, 1907, shows that there are 3515 miles of railroad in the State, an increase of 70 miles as compared with the end of the last fiscal year. The railroads have also been considerably improved by the laying of much new and heavier rail, while some wooden bridges have been replaced by steel bridges. Various buildings and depots have also been improved, while in other cases new buildings were erected. There have also been many additions to the equipment. The gross receipts of the lines in the State were \$42,762,490, and the net \$12,209,194 for the fiscal year ended last June, while the figures for 1906 were gross \$39,066,736 and net \$11,531,092.

### To Improve an Old Line.

Mr. Charles D. Haines of New York, who lately purchased the New Orleans, Fort Jackson & Grand Isle Railroad, running from Algiers, opposite New Orleans, La., to Buras, La., 60 miles, is reported as saying that about \$1,500,000 will have to be spent to make the proposed improvements, which include the building of a branch from Myrtle Grove Plantation to St. Denis, 13 miles; also an extension from Buras to Fort Jackson, 12 miles. The entire line from Algiers to Buras is also to be reballasted. The construction of an extension beyond Fort Jackson 40 miles to the Gulf is contemplated. A line of steamboats is to be established between St. Denis and Grand Isle.

### Atlanta to Augusta.

Matthew Mason of Atlanta, Ga., who is vice-president and general manager of the Atlanta & Carolina Electric Railway Co., which proposes to build a line from Atlanta to Augusta, Ga., about 200 miles, is reported as saying that the survey has been finished and rights of way secured from Atlanta to Athens, Ga., and that the survey from Athens to Augusta will probably be made by two parties of engineers, one starting at each end of the route. As heretofore reported, the construction contract has been let, and grading is expected to begin soon. It is proposed to complete the line within two years.

### "Orient" Over the Divide.

Arthur E. Stilwell, president of the Kansas City, Mexico & Orient Railway Co., is reported at Kansas City as saying that passenger trains on his line are now operating over the Continental divide in the mountains of Mexico. Also that a few days ago the station of Sanchez, 12 miles west of the summit, was opened, and regular trains are now running for a distance of 200 miles west of Chihuahua.

### Swansboro to Deppe.

The Swansboro Land & Lumber Co. of Swansboro, N. C., informs the MANUFACTURERS' RECORD that it is building a railroad from Swansboro to connect at a point near Deppe, 15 miles from Swansboro,



with the Wilmington-Newbern branch of the Atlantic Coast Line. There are eight miles of track laid out from Swansboro, on which the company is now operating its log trains. The line runs through the company's timber holdings for about 13 miles, and it is proposed to complete it as early as possible, so as to give an all-rail route for lumber shipments. The company expects to make it a commercial road.

#### Georgia & Florida Plans.

The annual meeting of the Georgia & Florida Railway Co., recently held at Augusta, Ga., was followed by the statement that the construction of the necessary connecting links to complete the proposed line from Augusta to Valdosta, Ga., and Madison, Fla., will be pushed, and by next fall, or at least late in 1908, it is expected to have the entire system in regular operation. The company now has 225 miles of line in separate pieces, and about 125 miles are to be built to connect up these various roads, as heretofore described. The construction is under the supervision of Chief Engineer G. B. Hazelhurst at Augusta.

#### An Ambitious Project.

According to a report from Norfolk, Va., capitalists in Paris, France, and Geneva, Switzerland, have subscribed \$10,000,000 to build a single-track railway from some point in the Mississippi valley, perhaps Cairo, Ill., to Norfolk, and \$2,500,000 are available for preliminary work. It is said that an agent of the syndicate was seen in New York recently and he outlined the plan. There is talk also to the effect that the syndicate contemplates in connection with the railroad the establishment of a steamer line from Norfolk, Va., to Cherbourg, France.

#### Railroad Notes.

The Tampico Short Lines have been incorporated at Augusta, Maine, with \$25,000,000 capital, presumably for railroad purposes in the vicinity of Tampico, Mexico. The promoters are James E. Manter, Clarence E. Eaton, Charles D. Fullerton, B. A. Furbish, J. F. Redmond and Millard W. Baldwin.

The Southern Railway Co. announces the following appointments: C. L. Bunting, commercial agent, Macon, Ga., vice J. O. Moore, resigned to engage in other business; J. B. Erwin, Jr., commercial agent, Mobile, Ala., vice C. L. Bunting, promoted; Morgan Richards, soliciting agent, Selma, Ala., vice J. B. Erwin, Jr., promoted.

J. M. Dewberry of Birmingham, Ala., and J. A. Vandergrift of Philadelphia, Pa., both of whom are interested in the Birmingham & Gulf Railway & Navigation Co., have visited Mobile, Ala., in connection, it is said, with the company's plan to establish a terminal there. It is said that the terminal may be on Dauphin Island.

An official letter to the MANUFACTURERS' RECORD says that the St. Joseph & Grand Island Railway Co. of St. Louis, Mo., has been building this year a branch from Stouts to Highland, Kan., about six and one-half miles. Track has been laid for four and one-half miles, but it is expected to complete the line into Highland, 6.6 miles, by December 31.

The Lexington Interurban Railway Co. of Lexington, Ky., is reported to have elected John Blair Macafee of Philadelphia as vice-president to succeed Louis Des Cognets of Lexington, resigned. Mr. Des Cognets will, however, continue on the board of directors. J. D. Crawford is reported to have been elected general manager to succeed Robert T. Gunn, who has resigned to go with the Fort Wayne & Wabash Valley Railway. O. R. Bilbrow was elected auditor.

## MINING

### New River and Kanawha Fields.

Coal loading in the New River and Kanawha fields for November aggregated 1,117,080 tons, of which the New River field shipped 531,015 tons and the Kanawha field 586,065 tons. Coke shipments from the New River field amounted to 728 cars, 7686 tons of which were shipped to tidewater, and from the Kanawha field to 10,200 tons. Shipments were loaded at the following points: New River—Quinnimont, 11 cars; Raleigh, 2; Macdonald, 73; Turkey Knob, 78; Collins, 99; Harvey, 100; Fire Creek, 20; Nuttall, 24; Fayette, 8; Ansted, 107; Rush Run, 13; Brooklyn, 51; Chapman, 37; Kaymoor, 105. Kanawha—Windsor, 2430 tons; Crescent, 810; Great Kanawha, 1770; Powellton, 2880; St. Clair, 2310.

### Buys Coal Rights.

A report from Wheeling, W. Va., announces the purchase by the Bituminous Coal Co. of America, main offices 299 Broadway, New York, of the coal on the "Valley Farm" at Glendale, Marshall county, West Virginia. The property is said to contain 250 acres, and was sold by Mrs. W. M. Riggs and Miss Carrie Cockayne for about \$40,000. It is stated that the company has secured a lease on the river front for opening a mine and erecting tipples to load coal on cars and boats. It is at present developing a mine on Parr's run, near Moundsville, and is reported as intending to sink a shaft on the Cockayne farm and tunnel through to Parr's run shaft.

### Purchases Coal Property.

Mr. S. S. Seligman of Mahoney City, Pa., acting for himself and associates, is reported to have purchased the coal properties of the Chenoa Coal Co. of Middlesboro, Ky., consisting of a leasehold on 640 acres of valuable coal lands, with a mine in operation. It is understood that the purchasers will install modern machinery and increase the output of the mine, which is located on the Chenoa branch of the Louisville & Nashville Railroad, on the lands of the Louisville Property Co. Messrs. J. R. Miller and Clyde Miller, both of Middlesboro, are said to be the principal owners of the Chenoa Coal Co.

### Coal Mines and Coke Ovens.

The Southern Coal & Coke Co. of Mt. Sterling, Ky., has incorporated with a capital stock of \$300,000 to develop about 5000 acres of coal lands which the company owns in Knox county, Kentucky. It is understood that coke ovens will be constructed, and active operations will begin at once. Incorporators of the company include Messrs. James M. Bigstaff, who is the president; L. L. Bridgeforth, Lewis Apperton and M. O. Cockrill, all of Mt. Sterling; J. E. Golden of Barboursville, Ky., and F. Clay Turner of Lexington.

### Tennessee State Mines.

A report showing the output of the Tennessee State coal mines during the fiscal year ended November 30 estimates the value of the product at \$123,126.32, as compared with \$400,946.71 for 1906. The operating expenses for the year just closed amounted to \$177,420.46, as against \$185,485.25 in 1906. The report was prepared by Warden W. F. English or the branch State prison at Brushy Mountain, who states that the condition of the convicts working the mines is satisfactory.

### To Develop Sulphur Mines.

A report from Hot Springs, Ark., announces the incorporation of the Potash Sulphur Realty Co., with a capital stock of \$100,000, for the purpose of acquiring

and developing sulphur property near that city. Among the incorporators of the company is Mr. Silas Brosias of Brazil, Ind., who has secured a mineral lease on the property and is at present sinking a shaft. Other incorporators are Messrs. W. G. Fordham, who is the president of the company, and T. J. Pettit.

The Kentucky Midland Railroad, a new company organized by Northern capitalists, is reported to have acquired 13,000 acres of coal and timber lands between Central City and Madisonville, Ky., and expects soon to have a mine in operation producing 2000 tons of coal daily.

### The Raywood Company.

Organization has been effected by the Raywood Company of Houston, Texas. Edwin D. Lowe of Boston, Mass., has been elected vice-president; E. S. Hill, treasurer; C. B. Moling, secretary, and W. S. Delery, local manager. This company was incorporated recently with a capital stock of \$750,000, and proposes to build a mill for manufacturing paper pulp from rice straw, besides converting the protein and nitrogenous matter of the straw into alcohol. Last July the MANUFACTURERS' RECORD referred to the company as having purchased and to continue the development of the Raywood Rice Milling & Canal Co.'s properties, including 2000 acres of rice lands, mill with daily capacity of 2400 bags of rice, 37 miles of canals and laterals and pumping station of 3000 horse-power on Trinity river. Later the company's president will be elected.

### Owensboro to Rockport.

The MANUFACTURERS' RECORD is informed that the Owensboro & Rockport Bridge and Terminal Co., which was organized to build a line across the Ohio river, including a bridge, between Owensboro, Ky., and Rockport, Ind., has secured most of the right of way, and the plans and specifications, which are being prepared by the Osborne Engineering Co. of Cleveland, are nearly completed. No contracts have been let as yet, but it is expected that work will be begun and actively prosecuted in the spring. E. T. Franks of Owensboro, Ky.; Prof. S. H. Kennedy of Rockport, Ind., and others are interested.

### Bonds for Construction.

A letter from Columbus, Miss., to the MANUFACTURERS' RECORD says that the Aberdeen & Tombigbee Valley Railroad Co., H. E. Reynolds, president, Aberdeen, Miss., has filed a mortgage to the Central Trust Co. of Illinois, trustee, for \$750,000 to secure that amount of 30-year 5 per cent. bonds which will be used for the construction of the company's proposed line that will be 65 miles long to connect Okolona, Aberdeen, Pickensville and Columbus, Miss.

Messrs. W. W. Kyle, Robert Corley, W. D. Myers, F. H. Votaw, J. J. Elam, Mark Weiss and J. L. Keith of Beaumont, Texas, have incorporated the West India Lumber Co., with a capital stock of \$150,000 to develop timber and turpentine lands on the island of Santo Domingo. The main offices of the company will be at Beaumont.

The opportunities available in Johnson county, Texas, and Cleburne, its principal city, for those seeking either homes or investments have been fully described in an illustrated booklet which is being distributed by the Cleburne Land Co. The many scenes shown in the booklet give a comprehensive idea of how wonderfully the great State of Texas is being developed by energetic people.

## LUMBER

### Buys Mill and Timber.

The Louisiana Land & Lumber Co., 405 Godchaux Building, New Orleans, La., has recently purchased the hardwood mill and timber lands of the Conroy Lumber Co. at Chinchuba, La., together with 13,000 acres of gum, cypress and other timber in the vicinity of Honey Island, La., estimated to cut 125,000,000 feet of timber. It is understood that the mill at Chinchuba will be equipped with new machinery and a new mill erected at Honey Island, on the line of the New Orleans & Northeastern Railroad, the latter to be equipped with a nine-foot band saw of 50,000 feet daily capacity. Officers of the Louisiana Land & Lumber Co. include Messrs. Morgan Jones, Fort Worth, Texas, president, and W. A. Hill of New Orleans, La., secretary and treasurer.

### Georgia-Florida Association.

At the regular meeting of the Georgia-Florida Sawmill Association at Tifton, Ga., last week a resolution was adopted authorizing the appointment of a committee of seven members, consisting of three from Georgia and three from Florida, with Capt. H. H. Tift as chairman, to make a full investigation as to what, if any, changes are desired in the interstate rules of 1905. Reports from members of the association indicate that nearly all mills are running on short time or closed down. The next meeting of the association will be held at Jacksonville, Fla., on January 14, 1908.

### Building in Jacksonville.

The building inspector of Jacksonville, Fla., estimates the value of all buildings erected in that city from 1901 to 1905 at \$14,891,592. In 1906 the estimated valuation of buildings erected amounted to \$2,968,709, and up to December 12 of the present year to \$2,995,890, making a total since the fire in 1901 of \$20,856,191. This represents 7399 permits for new buildings, in addition to 3944 permits for repairs, alterations and miscellaneous structures.

### West Virginia Timber Lands Sold.

One of the important timber-land sales of the month was that effected last week by the Krebs Lumber Co. of Clarksburg, W. Va. The property comprised 26,000 acres of hemlock, spruce and hardwood timber located in Pocahontas, Randolph and Webster counties, West Virginia. Massachusetts parties bought the lands.

### Barrel Materials Wanted.

The Alleghany Lime Co. of Christiansburg, Va., is in the market for hoops and staves for lime barrels.

### Lumber Notes.

The annual meeting of the Memphis (Tenn.) Lumbermen's Club will be held on January 7, 1908, at which time the election of officers will be held.

The schooner Fairfield cleared from Wilmington, N. C., last week with a cargo of 546,000 feet of lumber for New York city, consigned by the Cape Fear Lumber Co.

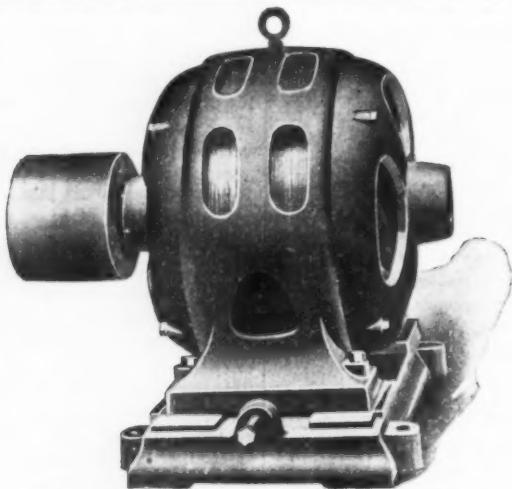
The Texas Turpentine Co. of Houston, Texas, has incorporated with a capital stock of \$100,000 to develop turpentine lands. Incorporators of the company include Messrs. Frank Andrews and J. S. Rice, both of Houston; F. L. Swent, Douglas, Ga., and associates.

It is announced that the Louisville & Nashville Railroad will plant a large number of Catalpa trees during the winter and spring on land which it owns near Mobile, Ala. About 900 trees will be planted to the acre, the work to be in charge of John P. Brown, an arboriculturist of Connellsville, Ohio.

## MECHANICAL

## The Triumph Induction Motors.

The continued and increasing demand for induction motors has prompted one of the best-known manufacturers of electrical machinery to add that class of equipment to its products. Before offering these induction motors the manufacturer conducted a series of exhaustive tests under the supervision of experienced engineers fully acquainted with the latest designs in such machines. These new designs are now ready for buyers. They are built by the Triumph Electric Co. of Cincinnati.



25-H. P. THREE-PHASE INDUCTION MOTOR.

Ohio. Four accompanying illustrations present views of the 25-horse-power induction motor, the stator, the rotor and an interesting efficiency diagram.

Describing its induction motor, the company says:

"The essential requirements of a good motor are efficiency, durability and simplicity. The Triumph induction motor combines all three.

"To the average purchaser the question of efficiency may not appear of much consequence, but when large installations are under consideration even a small difference makes a considerable variation in the operating expenses.

"To obtain the highest efficiency the very best grade of materials must be se-

constructed only of iron of the highest permeability and copper of the highest conductivity.

"Equally as important as the efficiency is the durability of any particular design. Durability is the result of correct design or proportioning of parts to safely withstand the maximum strains to which they may be subjected. If not properly constructed, a motor will require constant repairs and attention which will largely exceed in cost any possible saving in efficiency by the use of high-grade materials.

"In the Triumph design special attention has been given to the correct propor-

tioning and type of all parts, resulting in a motor of extremely durable and rigid construction. Unnecessary materials have been eliminated, and the materials used are employed to the best advantage. Triumph motors are therefore light, easy to handle, occupy small space and require inexpensive foundations or supporting framework.

"Simplicity of construction follows naturally upon the heels of efficiency and durability. Simplicity implies a minimum number of parts requiring attention, ready accessibility for inspection, small cost for repairs, low depreciation and a machine that can safely be placed in the hands of unskilled employees.

"As there is no electrical connection be-

panned, reducing the core losses to a minimum.

"The stator coils are form-wound, thoroughly insulated and treated with a special insulating varnish, after which they are inserted in the stator slots and held firmly in position by wooden wedges. In addition to the insulation around the coil, the slots are also lined with insulating materials.

"Cast-iron bearing brackets are centered in and bolted to the stator frame. These are machined in jigs, which insures their absolute alignment when mounted on the stator frame. This construction makes all

an induction motor may be installed in dusty or dirty places, where there are inflammable materials or gases and where it would not be safe to locate a motor of any other type.

"These motors, when running continuously under full load, will not rise in temperature more than 40 degrees centigrade above that of the surrounding atmosphere, and in addition to this will carry an overload of 25 per cent. for two hours without increasing the temperature to exceed 15 degrees centigrade above that at full load.

"The power factors are exceedingly high, due to their excellent design. This



THE STATOR.

brackets interchangeable, enabling us to furnish duplicate parts on short notice. The brackets contain large oil wells holding an ample supply of lubricant, and are of such construction that the machine can be arranged for floor, wall or ceiling use.

"The rotor is of the ironclad laminated core type, the laminated core being treated in the same manner as above described for the stator. These laminations are mounted on a steel shaft and firmly held together by end plates.

"The windings consist of heavy solid copper conductors which are imbedded in slots, and are riveted and soldered at each end into short-circuiting rings, forming the well-known squirrel-cage design.

"The shaft of the rotor is of hammered steel of large diameter, insuring rigidity.

"This construction is practically indestructible.

"The bearings or journal boxes are made of special anti-friction metal, reamed to size, and are interchangeable. They are liberally proportioned, insuring cool running and minimum wear.

"These journals are held firmly in the bearing bracket, and are of the ring-oiling type, providing a flood of lubricant over the entire bearing surface.

"Each motor (unless otherwise ordered) is supplied with a cast-iron sliding base, with an adjusting screw, so as to take up the slack of the belt. The design of the base is such that the same motor can be placed on the floor, wall or ceiling and so constructed that the motor is firmly clamped to it.

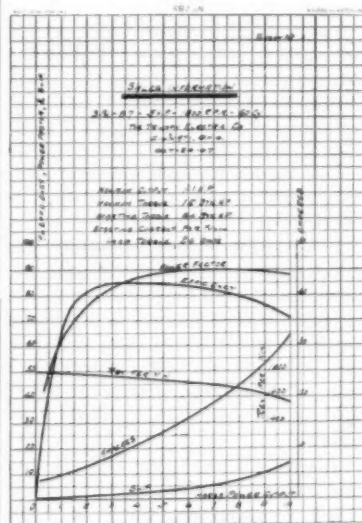
"Triumph motors regulate closely, the drop in speed between no load and full load will not be more than 6 per cent. in the smallest sizes and less as the size increases.

"An induction motor cannot under any condition run away or attain a higher speed than its no-load or synchronous speed, and as all Triumph motors are carefully tested before shipment, there is no possibility of breakdown under ordinary working conditions.

"Due to the extremely simple and rigid construction, no commutator or brushes requiring attention, therefore no sparking,

property is of great importance, as it governs the output of the generator furnishing the current. As an example, a generator which will supply 90 horse-power with motors of 90 per cent. power factor will give but 80 horse-power with motors of 80 per cent. power factor.

"Standard machines are built for 110, 220, 440 and 550 volts, for 60 and 25 cycles, and for two or three-phase circuits. In addition to these, we can build them specially for other frequencies and voltages.



5-H. P. 3-PHASE 220-VOLT 1800 R. P. M. MOTOR.

lected; every item must be carefully chosen solely on the ground of its value for the specific purpose for which it is intended and entirely irrespective of its cost. All materials must be assembled in accordance with a correct design, as the best material would be of no advantage if not properly proportioned for the work it is to perform.

"The combination of high-grade material and good design results in a machine which will give a maximum output for a minimum weight.

"Our motors are correctly proportioned,

tween the rotor and stator, no commutator or brushes, the Triumph induction motor is extremely simple in construction, the only wearing parts being the bearings, so that it can be operated for long periods continuously.

"In the construction of the stator it will be noted that ample openings are provided for the free circulation of air around the stator core and stator windings, resulting in good ventilation and low temperatures.

"The stator core is built up of discs of special non-ageing steel thoroughly ja-

"For variable-speed work and for extremely heavy starting duty we are prepared to equip these motors with slip-ring attachments. These, however, will be treated as special motors and will only be made upon orders.

"A great many applications, especially for direct attachment, require the use of either a very slow or special speed motor. As these are quite costly, the preferable arrangement, and one equally as satisfactory, is the use of a standard speed motor combined with a back-gear attachment.

"Motors of five-horse-power size and



smaller can be thrown on the line and started in operation without the use of any starting device excepting a switch, and under certain conditions this is allowable with the larger sizes.

"Above the five-horse-power size the use of a starting box is advisable, due to the excessive flow of current at starting.

"During the course of construction all parts are given a series of close inspections and tests, and upon completion every machine is given a thorough running test not only for capacity, but for temperature, insulation, resistance, etc., so that every machine is known to be in perfect condition when it leaves our works.

"We therefore guarantee Triumph apparatus to be free from mechanical or electrical defects."

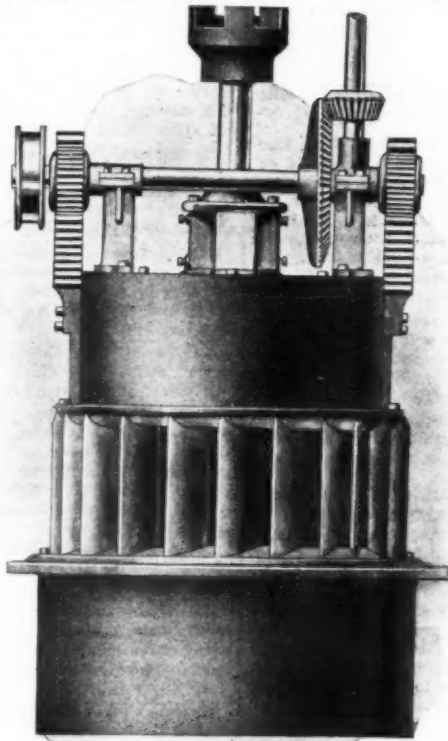
#### McCormick Turbine Water-Wheel.

Half a century has passed since turbine wheels came into general use, and great

most effective manner. They are shown so plainly in the engraving of the wheel that extended description is unnecessary.

The gate is what is known as the cylinder type. It is one piece of casting similar to a pulley rim, but having lips or projections on its lower edge which project between the chutes and serve to give a smooth delivery to the water as it rushes to the wheel when the gate is raised. This style of gate is the strongest, most durable and tightest of all forms when properly designed and fitted. It cannot break or become leaky, and the pressure of the head does not affect its working. When it is desirable to operate the gate with a governor its weight can be balanced as perfectly as desired and the motion of the wheel kept under perfect control.

The steps of the McCormick wheels are adjustable. By that is meant they can be raised if they wear down, which is not liable to occur if set low enough to keep



THE McCORMICK TURBINE WATER-WHEEL.

advances have been made in the design.

The McCormick turbine was brought to its present high state of perfection by painstaking and systematic effort. The inventor, being a mechanic of skill, patience and ability, has made the matter of water-wheel construction a lifelong study, and has met the actual requirements of water-wheel construction.

In the McCormick wheel the runner is made by first casting the buckets separate and finishing them up smooth and true, setting them up in a mold and casting a hub and cap thereon which weld to the dovetail top and inner edge of the buckets, making a solid and substantial wheel that will stand any strain for which it is intended. The bottom of the buckets are beautifully modeled curves, which discharge the water inwardly, outwardly and downward after its velocity is thoroughly expended. It is this form which allows free escape of the water the instant its usefulness has expired that accounts for the combination of high percentage and immense power which these wheels are made to develop. A beveled flange is cast around the lower part of the runner to strengthen the buckets and form a running joint with the case.

The guides (or case) consist of stationary cast chutes of proper strength set to direct the water to the buckets in the

step covered with water. This is a great convenience, and obviates making a new step or sending to the shop for one.

There is no top-running point on the McCormick wheel to wear or create friction or become leaky, and service cannot, therefore, impair its efficiency. The running point at the bottom of runner can only leak when the step wears, and raising the steps makes it as tight as ever. These are features of construction peculiar to the McCormick, and their value cannot be overrated if durability and constant efficiency are considered. See accompanying illustration.

The McCormick turbine water-wheel is manufactured by the Barnard & Leas Manufacturing Co. of Moline, Ill.

#### Machinery for Cutting Excelsior.

An accompanying illustration presents a view of an interesting equipment—the Minor patent excelsior-cutting machine.

The main points are extreme simplicity, ease of operation, great efficiency, high quality of product, durability and low first cost as well as the small amount of power required to operate it.

The frame of the machine is about 10 feet high, and occupies a floor space of about 4 feet by 12 inches, thus making it practicable to install a number in one battery in a very small space.

Each machine requires about three horse-power to operate it, and one man can keep six in constant and successful operation at full capacity, which is about 1000 pounds of excelsior per day of 10 hours.

Many kinds of wood are now used for making excelsior, such as basswood, birch, maple, white ash, cherry, spruce, hemlock, cottonwood, willow, cypress, long and short-leaf pine, black and sweet gum and poplar.

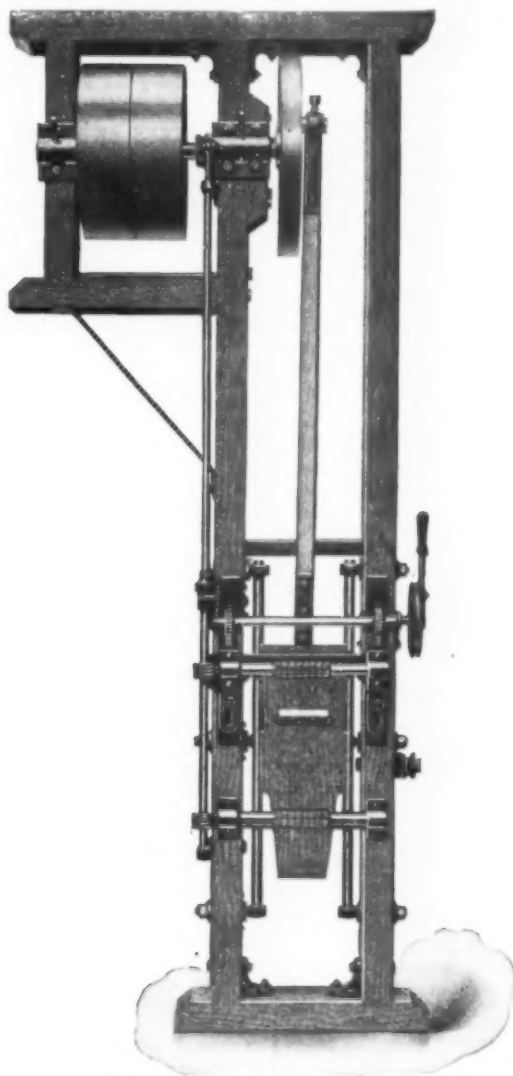
As the Minor machine works equally well with all kinds of wood, it is adapted to use in all sections of the country. Wood for making excelsior should be cut and split, same as other wood for the market, at a season when the bark will peel easily, preferably in the spring, then left to dry, when it may be cut to length, which is usually 54½ or 18 inches, and pile with the bark side up, so that it will dry still more.

It is then sawed to the proper length for the machine on a cordwood saw or equalizer. Round wood makes a superior grade of excelsior, and can be used as small as three inches in diameter when straight and free from knots. When under six inches in diameter it should not be split, and to obtain the best grades of excelsior and best results from machines

#### North Carolina Fishes.

The splendid work being done by the North Carolina Geological and Economic Survey in gathering together in book form exhaustive data relating to the resources and products of that State is again reflected in the second volume, which has just been issued, and which covers the fishes found in the different waters of the State. The volume is published both to awaken an interest in local fishes and also to give the people of North Carolina and others a more accurate knowledge of their abundance, distribution, habits, migrations, spawning, food values, etc. It is also believed that such knowledge will lead to a fuller realization of the economic importance of the State's fishery resources, create a deeper interest in the welfare of both fishes and fishermen and a better understanding of the conditions and needs of the industry, all with the view to placing this important branch on a permanent basis and making it yield an increasing revenue both to the State and to the people.

The work is very broad in its scope, and covers every fish known to inhabit the waters of the State, and they are all illustrated, either by plain cuts or in colors. The subject-matter is both practical and technical, and great care was exercised in preparing it to make the work a useful



THE MINOR EXCELSIOR MACHINE.

the wood should be kept under cover after having been cut and piled.

When this is done and knives and spurs are kept sharp the output is increased and a better grade of excelsior produced.

The Minor machines will, however, cut green or wet wood, and with the equipment accompanying it will make every grade of excelsior.

This machine is built by the American Sawmill Machinery Co. of Hackettstown, N. J.

one to all those interested in the subject. The volume contains 453 pages, with 21 plates and 188 text figures of the different fishes. The subject-matter is the work of Hugh M. Smith, deputy United States Commissioner of Fisheries, and the volume is published under supervision of State Geologist Joseph Hyde Pratt.

At Bristol, Tenn.-Va., more than \$1,000,000 worth of buildings are now in course of construction.

# Construction Department

## TO OUR READERS!

In order to understand and follow properly the Construction Department items, please bear in mind the following statements:

### EXPLANATORY

The MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the MANUFACTURERS' RECORD.

### ADDRESS FULLY

To insure prompt delivery of communications about items reported in these columns, the name of one or more incorporators of a newly incorporated enterprise should be shown on the letter addressed to that town, or to the town of the individual sought, as may be shown in the item, as sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. This will help to insure prompt delivery of your communication, although it is inevitable that some failures on the part of the postal authorities to deliver mail to new concerns will occur.

### WRITE DIRECTLY

It is suggested to advertisers and readers that in communicating with individuals and firms reported in these columns, a letter written specifically about the matter reported is likely to receive quicker and surer attention than a mere circular.

### BRIDGES, CULVERTS, VIADUCTS

Dallas, Texas.—City will construct concrete bridge at Ross and Haskell streets. Structure will be about 60 feet wide and have a 20-foot opening for the passage of water. Address The Mayor.

El Paso, Texas.—D. K. Colburn, bridge engineer, Houston, Texas, has about completed plans for construction of proposed viaduct across Austin street by the Galveston, Harrisburg & San Antonio Railway Co. (Previously mentioned.)

Graham, Texas.—Mitchell & Pigg, Weatherford, Texas, have contract to construct two suspension bridges across the Brazos river at \$37,280.

Hattiesburg, Miss.—City has about decided to erect three concrete bridges instead of steel structures, as at first determined, and has instructed the city engineer to prepare plans and estimates on the concrete work. Contract awarded for erection of steel structures has been annulled.

Madison, Ark.—T. C. Merwin, County Clerk, St. Francis county, Forrest City, Ark., will open bids January 2 for construction of 700-foot steel highway drawbridge over St. Francis river at Madison; H. N. Pharr, Randolph Building, Memphis, Tenn., consulting engineer. Cost is estimated at from \$30,000 to \$35,000. (See "Machinery Wanted.")

Ocala, Fla.—Marion county will construct steel bridges across Blue river near Dunnellon, Fla., and across Withlacooche river at Stokes Ferry. Contract will be awarded January 8; S. T. Sistrunk, clerk Board of County Commissioners. (See "Machinery Wanted.")

Owensboro, Ky.—Owensboro & Rockport Bridge & Terminal Company is proceeding with arrangements for construction of proposed bridge across the Ohio river, between Owensboro and Rockport, Ind. Plans and specifications being prepared by the Osborne Engineering Co., Cleveland, Ohio, are nearing completion. No contracts have been awarded, but it is expected that active construction work will begin in the spring. S. H. Kennedy, Rockport, Ind., is president,

and E. T. Franks, of Owensboro, first vice-president. (Previously reported.)

San Antonio, Texas.—Galveston, Harrisburg and San Antonio Railway, W. G. Van Vleck, manager, Houston, Texas, is having plans prepared for erection of viaduct at New Braunsfels avenue.

Skiatook, Okla.—Tulsa County Commissioners will undertake bridge construction during the next two years, requiring structural steel.

### CLAYWORKING PLANTS

Charleston, W. Va.—Kanawha Brick & Tile Co. incorporated with \$100,000 capital stock by J. W. Jenkins, C. E. West, H. D. Rummel and others.

Gadsden, Ala.—Gadsden Brick Co. will rebuild plant recently reported burned at loss of \$6000, work to commence early in 1908; capacity of plant, 50,000 daily; W. T. Christopher, secretary and treasurer.

Meadville, Miss.—Meadville Brick & Lumber Co. incorporated with \$25,000 capital stock by M. G. Bradley of Meadville, L. E. Schilling and E. C. Schilling, both of Magnolia, Miss., and Clem V. Ratliff, Summit, Miss.

Monticello, Ala.—I. J. Dickens and others have organized a company to manufacture drain tiling.

Tampa, Fla.—M. H. Avram, New York, N. Y., has organized the Alece Stone & Brick Co. with \$50,000 capital stock to manufacture sand-lime and cement brick under patents of the Avram-Leet Engineering Co. of New York; machinery has been ordered.

### COAL MINES AND COKE OVENS

Barboursville, Ky.—Knox Coal Co., previously organized, is reported planning to develop coal mines in Knox county. W. R. Black is interested.

Birmingham, Ala.—Alabama Coal & Steel Co. incorporated with \$300,000 capital stock; Edward Z. Anderson, president, and Charles J. Ingalls, secretary-treasurer.

Birmingham, Ala.—Alabama-Gulf Coal Co., recently reported incorporated, has increased its capital stock to about \$500,000. Lewis Minot is vice-president and acting president.

Central City, Ky.—The Kentucky Midland Railroad (new company composed of Northern capitalists) has secured, it is reported, 13,000 acres of coal and timber land between Central City and Madisonville, Ky., and expects to soon have a coal mine in operation with capacity of 2000 tons daily.

Glendale, W. Va.—Bituminous Coal Co. of America, 299 Broadway, New York, N. Y., has purchased, it is reported, coal deposits on the Valley farm at Glendale, comprising about 250 acres, for \$37,500; also secured a lease on surface of the river front for opening a mine and erecting tipples for loading coal on cars and boats. Company will probably soon begin the shipment of coal from its new mine on Parr's run near Moundsville, W. Va., and it is understood its intention is to sink a shaft on the Cockayne farm and tunnel through the coal to connect with the Parr's run shaft and load coal from both mines on barges anchored at the Glendale mine.

Grafton, W. Va.—John T. McGraw and associates contemplate building coal tippie and coal bins at Grafton, latter to be used for storing coal which will be shipped from mines at Simpson, W. Va. (Mr. McGraw and associates were recently mentioned as having organized McGraw Coal Co. to develop 3000 acres of coal land at Simpson.) (See item under "Electric-Light and Power Plants.")

Jewett, Texas.—Trinity & Brazos Valley Railway, P. G. Burns, chief engineer, Fort Worth, Texas, will develop lignite mines near Jewett to supply fuel for its locomotives. (See item under "Mining," Mexico, Texas.)

Middlesboro, Ky.—Reported that S. S. Seligman, Mahanoy City, Pa., and associates have purchased mines of the Chenoa Coal Co., J. R. Miller, president. Leasehold consists of 640 acres of coal land, and it is understood the purchasers will install new machinery and operate the mining plant.

Mt. Sterling, Ky.—Southern Coal & Coke Co. incorporated with capital stock of \$300,000 by James M. Bigstaff, L. L. Bridgeforth, Lewis Apperson and M. O. Cockrill of Mt. Sterling, J. E. Golden of Barboursville, Ky., and F. Clay Turner of Lexington, Ky. Company has purchased 5040 acres of coal lands

in Knox county and plans early development of the property; expects to begin shipping a large tonnage by next spring. Coke ovens will be built later. James M. Bigstaff is president.

Porter, Ala.—Reported that the Warrior-Pratt Coal Co. will open additional mines and build 100 coke ovens.

### CONCRETE AND CEMENT PLANTS

Buechel, Ky.—Kentucky Culvert Manufacturing Co., previously incorporated, will build frame shed 40x50 feet and install equipment of machinery for manufacturing metal culverts and metal forms of concrete; capacity to be six tons daily; Charles J. Fogenbush, general manager.

### COTTON COMPRESSES AND GINS

Knobel, Ark.—Knobel Union Gin Co. incorporated with \$12,000 capital stock by F. Hannan, R. V. Harper, C. T. Orr, J. M. Michael and others.

### ELECTRIC-LIGHT AND POWER PLANTS

Baltimore, Md.—Consolidated Gas, Electric Light & Power Co., P. O. Kellhoits, engineer, Liberty and Lexington streets, has awarded contract to Harry H. Brown, 109 Clay street, for improvements to its Penn-street electric substation. New roof, supported by steel trusses, will be built, also large skylight and ventilators, and a cable and wire tower constructed.

Fairmont, S. C.—Tyger Cotton Mills has purchased water-power property (for \$10,000), which will be developed to furnish power for proposed additional mill. (See item under "Textile Mills.")

Gorman, Texas.—Gorman Light & Power Co. incorporated with \$15,000 capital stock by F. B. Winters, S. B. Bowles and W. A. Wal-drop.

Grafton, W. Va.—John T. McGraw and associates, purchasers of Grafton Gas & Electric Light Co., will double capacity of electric plant. Improvements to be undertaken include installation of 150-horse-power engine to operate dynamo, furnishing power for traction company's cars, and erection of addition to boiler-rooms, providing space for two new boilers. About \$20,000 will be expended. It is also contemplated to build coal tippie and coal bins, latter to be used for storing coal from mines at Simpson, W. Va.

Littleton, N. C.—A. E. Gonzales and W. H. Lyles of Columbia, S. C., are reported to have acquired water power on Broad river at Littleton and contemplate building dam for development. Options are now being secured on river bottom lands.

Little Rock, Ark.—Penitentiary Board will improve electric light system; John Page, secretary.

Natches, Miss.—Krumhaar & Aiken, engineers and contractors, New Orleans, La., will estimate cost of installing machinery in water-works plant to generate electricity for public lighting and for municipal offices. (Recently mentioned.)

New London, N. C.—New London Development Co. incorporated with \$100,000 capital stock to construct and operate electric-light and power plant, operate telephone lines, etc., by F. A. Silver, Greensboro, N. C.; C. W. Mason and E. M. S. McKee, Altoona, Pa., and others.

Shepherdstown, W. Va.—Shepherdstown Electric Light & Power Co. incorporated with \$30,000 capital stock by Samuel J. Hodges, Harrison Schley, E. H. Rinehart and others.

St. Louis, Mo.—The North American Company, C. W. Wetmore, president, New York, N. Y., has authorized an increase in capital stock from \$10,000,000 to \$18,000,000 of the Union Electric Light & Power Co., a subsidiary corporation. Company has acquired the Laclede Power Co., which operates the Edison Electric Illuminating Co. of St. Louis.

St. Petersburg, Fla.—Charles Braaf contemplates building an electric-light plant. (See item under "Miscellaneous Construction.")

Tybee, P. O. Savannah, Ga.—Stubbs & Keen will install electric-lighting plant in connection with summer resort. (See "Machinery Wanted.")

Van Buren, Ark.—Fort Smith Light & Traction Co., Fort Smith, Ark., has been granted 50-year franchise to distribute electricity for light, heat and power purposes. (Recently mentioned.)

Wheeling, W. Va.—Wheeling Electrical Co. will apply for 50-year franchise. Company is identical with the Consumers' Electrical Co., the former owning the generating plant and manufacturing electricity at its powerhouse and the latter being the distributing company. If franchise is granted it is planned to consolidate the two companies as the Wheeling Electrical Co. and build electric plant, increasing present capacity.

### FOUNDRY AND MACHINE PLANTS

Buechel, Ky.—Kentucky Culvert Manufacturing Co., previously incorporated, will build frame shed 40x50 feet and install equipment of machinery for manufacturing metal culverts and metal forms for concrete; capacity to be six tons daily. William F. Fogenbush is president and Charles J. Fogenbush, general manager.

Charlotte, N. C.—Automobile Garage and Repair Shop.—Charlotte Motor Car Co., A. Burwell, Jr., manager, will establish garage recently mentioned; will sell, store and repair automobiles. Building, 33x40 feet, will be erected; to have three floors; equipped with elevator, etc.; architects, Hook & Rogers. (See "Machinery Wanted.")

Chattanooga, Tenn.—Garage.—Chattanooga Automobile Co. will overhaul building and install machinery in repair shop; machinery purchased; Chas. Forstner, manager. (See item under "Miscellaneous Structures.")

Dallas, Texas.—Implements.—Texas-Ohio Cultivator Co. incorporated with \$30,000 capital stock by C. E. Hamlin, C. S. Cave and W. B. Dix, all of Dallas, and H. C. Stahl, Bellevue, Ohio.

Estherwood, Ia.—Blacksmith and Wheelwright Shop.—W. Fleshan, Uvalde, Texas, will establish blacksmith and wheelwright shop at Estherwood.

Frederick, Md.—Plumbing Supplies.—John Mitchell, Jr., Washington, D. C., has leased the Montrose Iron Works at Frederick and will manufacture plumbing supplies, etc. W. S. T. Diven will be retained as general manager.

Gadsden, Ala.—Stoves.—A. & J. Manufacturing Co. will install new cupola, increasing present capacity of 15,000 pounds.

Hattiesburg, Miss.—Cars.—Watkins Machine & Foundry Co. will remodel its plant, equipped for manufacturing logging, box and flat cars and gondolas and for general repair work.

Houston, Texas.—Pumps, etc.—Layne & Bowler Co. incorporated with \$300,000 capital stock to succeed Layne & Bowler and continue the manufacture of a patent centrifugal pump and oil and water well screen; M. E. Layne, president; P. D. Bowler, vice-president, and M. D. Fields, secretary-treasurer.

Montgomery, Ala.—Cotton-harvesting Machinery.—Worswick-Haardt Harvester Co., George Haardt, president, recently reported incorporated with \$300,000 capital stock to manufacture cotton-harvesting machinery and implements, etc., will erect building, the character of which is not decided. (See "Machinery Wanted.")

New Orleans, La.—Harvesting Machinery.—Cockrell Harvesting Machinery Co., recently reported incorporated with \$5,000,000 capital stock, will establish plant in New Orleans for manufacturing especially the machine invented by F. M. Cockrell, Jr., for cutting, stripping and tipping the sugar-cane stalk. E. T. Orear is president and Mr. Cockrell is secretary-treasurer, both of Kansas City, Mo.

Norfolk, Va.—Automobile Garage.—Rambler Garage & Supply Co., composed of E. J. Allen, J. L. Barnes and J. E. Johnson, will add vulcanizing department to automobile garage and install engine, dynamo and other apparatus required for generation of electricity for storage batteries, both for electrical automobiles and ignition batteries.

Norfolk, Va.—Marine Railway.—Norfolk Marine Railway Co. will install new machinery in plant to cost about \$10,000. Shops are now equipped with machine shop, boiler shop and blacksmith shop; Dave Howard, manager. (Recently mentioned.)

Sheffield, Ala.—Stoves.—King Stove Co. will rebuild stove plant recently reported burned at a loss of about \$30,000.

Sistersville, W. Va.—Sistersville Boiler Works, E. A. Ryan, proprietor, contemplates adding to present facilities for making boilers, gas tanks, etc., and will probably locate plant in another city.

St. Joseph, Mo.—Stoves.—American Stove &



Foundry Co. incorporated with \$25,000 capital stock by Joseph L. Freeland, W. E. Thompson and D. C. Reeves.

St. Louis, Mo.—Machinery.—Parker-Kohn Engineering Co. incorporated with \$12,000 capital stock by E. C. Parker, Nathan Kohn and Lee A. Hall to manufacture and deal in machinery.

St. Louis, Mo.—Machinery.—Siebert Machine Co. incorporated by Henry L. Spengler, Ernst G. Schoenle and Frederick Siebert to manufacture and deal in machinery.

## ICE AND COLD-STORAGE PLANTS

Alexandria, Va.—Union Ice Co. incorporated with E. C. Tague, president; A. H. Feltman, vice-president, and C. H. McVeigh, secretary-treasurer.

Atlanta, Texas.—The city is desirous of granting privileges to induce the establishment of an ice plant. For particulars address The Mayor.

Booneville, Ark.—Booneville Ice, Light & Cold Storage Co. recently reported incorporated with \$50,000 capital stock by C. G. Yates and others, will establish 20-ton ice plant at cost of \$3000 for building and \$15,000 for machinery; stone building 90x43 feet and 16 feet high will be erected; secretary, M. G. Latimer.

Johnson City, Tenn.—Home Ice Co., W. J. Exam, president and manager, will erect new building and install additional machinery, doubling former capacity.

Lagrange, Texas.—Lagrange Ice & Cold Storage Co. will restore plant recently damaged by fire.

Tybee, P. O. Savannah, Ga.—Stubbs & Keen will install four-ton ice plant in connection with summer resort. (See "Machinery Wanted.")

Wynne, Ark.—E. L. Burke of Burke & Co., Little Rock, Ark., recently reported to establish ice factory, will erect building and install machinery for 10-ton plant. The Frick Company of Waynesboro, Pa., has contract for equipment.

## IRON AND STEEL PLANTS

Birmingham, Ala.—Alabama Coal & Steel Co. incorporated with \$300,000 capital stock; Edward Z. Anderson, president. (See item under "Coal Mines and Coke Ovens.")

Holt, Ala.—Central Iron & Coal Co. has blown out its furnace for repairs.

Roanoke, Va.—West End Furnace Co. is proceeding with improvements to its furnace at Roanoke, consisting of installation of a Baker top, skipway, skip engines and changes in water supply; other betterments being provided include new heaters and condensers in power plant and relining of stoves. H. T. Deckert, Philadelphia, Pa., is president; main offices, 226 Chestnut street, Philadelphia, Pa.

## LUMBER-MANUFACTURING PLANTS

Blanton, Miss.—Steel's Bayou Tramway & Manufacturing Co., previously reported incorporated with \$50,000 capital stock, will construct and operate private standard-gauge steel railway for hauling lumber from mill of the Issaquena Land & Lumber Co. on Steel's bayou to the Yazoo & Mississippi Valley Railroad at Moores Siding, a distance of about five miles; construct and operate sawmills along the line, etc.; incorporators, George J. Nattkemper and J. R. Connelly, both of Terre Haute, Ind.; G. M. Sims and J. E. Meadows, both of Memphis, Tenn.

Bonita, Miss.—Millbrook Lumber Co. has been organized to build hardwood sawmill with daily capacity of 40,000 feet, investing about \$10,000. Mill will be operated by J. A. Spaulding.

Central City, Ky.—The Kentucky Midland Railroad (a new railway to extend from Central City to Madisonville, Ky.) has secured and will develop 13,000 acres of timber and coal lands. (See item under "Coal Mining and Coke Ovens.")

Charlotte Court House, Va.—Progressive Lumber Co. incorporated with \$15,000 capital stock; G. W. Watson, Tarro, Va., president; W. E. Scott, vice-president, and C. M. Hutcheson, secretary, both of Charlotte Court House.

Corydon, Ky.—Corydon Milling Co., incorporated with \$15,000 capital stock.

Elkins, W. Va.—E. B. Smith and associates, Clarksburg, W. Va., will install mill for cutting lumber into dimension stock.

Galveston, Texas.—Reported that Mr. Romano of Gonzales & Romano, Frontera, Mexico, is interested in establishment of mill for manufacturing mahogany logs, probably organizing company capitalized at \$100,000.

Georgia.—John H. Gorsuch, Charleston,

W. Va., has purchased 4000 acres of timberland in Southeastern Georgia and will develop the timber and manufacture staves.

Helena, Ark.—Archer Lumber Co. incorporated with \$100,000 capital stock by W. A. Archer, John I. Moore and J. A. Scott.

Houston, Texas.—Texas Turpentine Co. incorporated with \$100,000 capital stock to manufacture turpentine, etc., by Frank Andrews and J. S. Rice, both of Houston; F. L. Sweat, Douglas, Ga., and others.

Kansas City, Mo.—Logan-Smith Lumber Co. incorporated with \$5000 capital stock by F. P. Logan, J. Sidney Smith and Perry C. Smith.

Harrisburg, Ark.—Harrisburg Hardwood Lumber & Handle Co. will establish planing mill and handle factory; daily capacity lumber, 1500 feet; engineer, T. R. Shepard; manager, J. A. Davis. (See "Machinery Wanted.")

Lake Charles, La.—Consolidated Louisiana Lumber Co., Ltd., incorporated with \$25,000 capital stock; E. F. Wassey, president; L. P. Pavin, vice-president, and Guy Beatty, secretary-treasurer.

Louisville, Ky.—E. B. Norman & Co. incorporated with \$55,000 capital stock to operate sawmill by J. N. Norman of Louisville and E. B. Norman and R. Carnahan, both of Oneda, Ky.

Lumber City, Ga.—Krumrine Manufacturing Co. incorporated with \$10,000 capital stock by C. H. Krumrine, Sr., C. H. Krumrine, Jr., and Bell H. Krumrine.

Meadville, Miss.—Meadville Brick & Lumber Co. incorporated with \$25,000 capital stock by M. G. Bradley and others. (See item under "Clayworking Plants.")

Monroe, La.—Reported that the National Cooperative Company, Brooklyn, N. Y., represented by A. Schmidt, Jr., has purchased 2400 acres of timber land and will build sawmill for development.

Moss Point, Miss.—L. N. Dantzier Lumber Co. has increased capital stock to \$500,000; incorporators, J. L. Dantzier, G. B. Dantzier and others.

New Orleans, La.—Louisiana Land & Lumber Co. has purchased the hardwood mill and timber lands of the Conroy Lumber Co. at Chinchuba, La., and 13,000 acres of timber land at Honey Island, La., estimated to contain about 125,000,000 feet of timber. Mill at Chinchuba, having a present daily capacity of between 15,000 and 20,000 feet, will be equipped with new machinery and operated in connection with a nine-foot band sawmill of 50,000 feet daily capacity. The company proposes to build at Honey Island. Morgan Jones, Fort Worth, Texas, is president, and W. A. Hill of New Orleans, secretary-treasurer. Main offices, 406 Godchaux Building, New Orleans.

Orange, Texas.—Key Lumber Co. has been organized by J. D. Key and T. W. Key, both of Birmingham, Ala. Company has purchased the sawmill and timber lands of Robert Morgan, Sr., at Pruitt's Bluff near Orange and will install planing mill and dry-kiln. Operations will begin at once. J. D. Key will be in charge of the main office at Orange and T. W. Key in charge of mill.

Pelahatchee, Miss.—Adams Brothers Lumber Co. incorporated with \$30,000 capital stock by J. J. Wilson, F. R. Adams, G. E. Adams and others.

Savannah, Ga.—Walker-Kelly Lumber Co. incorporated with \$15,000 capital stock and privilege of increasing to \$100,000 by A. F. Peeples, P. E. Keller and Gordon Saussey. Company controls timber lands valued at about \$15,000, and will establish sawmill and wood yard.

Starke, Fla.—Bradford Turpentine Co., Jacksonville, Fla., will erect plant at Starke for extracting turpentine from the waste of the Townsend Lumber Co.'s mill and possibly also from stumps. Work on the resort building will probably begin about January 1.

Williamson, N. C.—Martin County Timber Co. incorporated with \$100,000 capital stock by Joseph G. Godard of Williamston, Robert White, Jonesville, N. C., and John T. Lynch, New York, N. Y.

## MINING

Arvonla, Va.—Slate.—James River Slate Co. (previously reported incorporated with \$50,000 capital stock) is understood to be planning the development of slate quarries on the 200 acres of land purchased near Arvonla. The company also proposes to manufacture the slate products quarried into roofing slate, door sills, steps, beams and other building materials. Charles J. Anderson, New Haven, Conn., is president, and other officers are E. V. Farinolt, Richmond, Va.; John T. McKenna, New Canton, Va.; and Hugh L. Kirby of West Virginia. Main offices in New Haven, Conn.

Bartlesville, Okla.—Zinc.—Bartlesville Zinc Co. incorporated with \$50,000 capital stock by Carl McLeof, Franz Meyer, B. Hothachild and Theo. Sternfeld, all of New York, N. Y.

Fall Branch, Tenn.—Zinc.—East Tennessee Mining & Development Co. will develop zinc ore property, and has installed separator and concentrator.

Hot Springs, Ark.—Potash and Sulphur.—Potash-Sulphur Realty Co. incorporated with \$100,000 capital stock by W. G. Fordham and T. J. Pettit, probably both of Hot Springs, and Silas Brosius, Brazil, Ind. Company will mine potash and sulphur at Potash-Sulphur Springs, in Garland county, where it controls 588 acres of land.

Mexia, Texas.—Limestone.—Trinity & Brazos Valley Railway, P. G. Burns, chief engineer, Fort Worth, Texas, will develop limestone quarries in Limestone county, between Mexia and Tehuacana, Texas, the product to be used in ballasting the tracks of the Dallas and Fort Worth branches. Company will also develop lignite mines near Jewett, Texas, to supply fuel for its locomotives.

Moundsville, W. Va.—Lime and Stone.—Empire Lime & Stone Co., recently reported incorporated with \$500,000 capital stock to develop mineral deposits, will erect limekilns and establish stone-crushing plant; products, lime, crushed limestone, sand and high-grade sandstone blocks; capacity, 1000 pounds lime and about 2500 tons crushed stone daily; J. E. Hedding, president and general manager; E. D. Leach, secretary and treasurer; architect and engineer not engaged. (See "Machinery Wanted.")

## MISCELLANEOUS CONSTRUCTION WORK

Austin, Texas.—Retaining Wall.—R. V. Dixon has contract to erect retaining wall at foot of Congress street. Structure will be 40 feet high, 9 feet thick at base and 3 feet thick at top. (Recently mentioned.)

Baltimore, Md.—Telephone System.—Chesapeake & Potomac Telephone Co. has finally completed arrangements whereby it takes over the Maryland Telephone Co., which had been operating in city and suburbs; purchase price was about \$300,000, subject to mortgage bonds for \$2,155,000. By this merger the Chesapeake and Potomac Company becomes the only telephone company operating in the city and surrounding territory. Main offices of Chesapeake & Potomac Telephone Co. are in Washington, D. C.

Bollinger County, Mo.—Drainage.—Little River Drainage Co. of St. Louis, Mo., organized by John H. Himmelberger, Otto Kochitzky and George Burrows, and is reported to drain about 500,000 acres of land in Bollinger, Cape Girardeau, Scott, Stoddard, New Madrid, Dunklin and Pemiscot counties, Mo.

Crenshaw, Miss.—Drainage.—United States Department of Agriculture is having surveys made of cut-off in Coldwater river extending from Askew, about 12 miles north of Crenshaw, to the river, a few miles north of Marks, Miss., a distance of about 18 miles. Work is in charge of D. C. Millu, drainage engineer. This project was investigated in the spring of 1907 by C. G. Elliott, chief drainage engineer in office of experiment station, Department of Agriculture. Surveys are also being made on the improvement of the channel above Crenshaw and of outlet channels extending to Tennessee line, in charge of L. L. Hillinger, drainage engineer. When surveys are completed a report will be submitted to Drainage Commissioner, who will probably form a district and undertake the work. Territory covers about 300,000 acres. S. H. McCrary, drainage engineer, is in charge of surveys in Bollinger county in vicinity of Cleveland and Shaw, Miss., to drain about 200,000 acres. William J. McEathron is supervising drainage engineer in charge of work in Mississippi.

Greenwood, Miss.—Canal.—Contract will be awarded December 31 for construction of main drains of Ellsberry Drainage District and Jones-Walton Drainage District, both in LeFlore county, Mississippi; G. W. Holmes, president Drainage Commissioners. (See "Machinery Wanted.")

Houston, Texas.—Irrigation System, etc.—The Raywood Company of Texas, recently reported incorporated with \$750,000 capital stock, has elected Edwin D. Lowe, Boston, Mass., vice-president; E. S. Hill, treasurer; C. B. Moring, secretary, and W. S. Delery, local manager. Company proposes to build mill for manufacturing pulp from rice straw; will also install machinery for converting protein and nitrogenous matter of straw into alcohol. Company was reported last July as having purchased and to improve properties of Raywood Rice Milling & Canal

Co., consisting of 21,000 acres of land, rice mill with daily capacity of 2400 bags, 37 miles of main canals and laterals and pumping station on Trinity river with capacity of 3000 horse-power. President of company will be elected later.

Richmond, Va.—Gas Mains.—City will lay gas mains in certain streets; contract to be awarded December 30; W. P. Knowles, superintendent. (See "Machinery Wanted.")

St. Petersburg, Fla.—Irrigation.—Charles Braaf is considering plans for irrigating his property in Northern Mobile. It is expected that 1,000,000 gallons daily of artesian water can be secured, a well recently sunk producing 200,000 gallons per day. It is proposed to lay a nine-inch pipe within a few feet of the well and run the combined flow through a turbine attaining sufficient power to raise the water from 50 to 100 feet to a standpipe. In this way it is planned to irrigate the land and generate power to operate an electric-light plant.

Tuscaloosa, Ala.—Locks.—Dravo Construction Co., Pittsburg, Pa., has been awarded contract for construction of locks and dams Nos. 14 and 15 on the Black Warrior river, about 30 miles from Tuscaloosa, at \$330,223.50 and \$330,137, respectively; bid on lockhouses in both instances \$3000; engineer in charge, Colonel Jervey, U. S. Army, Engineer Corps, Mobile, Ala. (Recently mentioned as being lowest bidder.)

Weatherford, Texas.—Heating.—Knights of Pythias awarded contract at \$16,381 to Collins Bros., Houston, Texas, for heating, plumbing, electric wiring and gasfitting of Widows and Orphans' Home now under construction.

## MISCELLANEOUS ENTERPRISES

Atlanta, Ga.—Creosoting Plant.—Mr. Collier, City Commissioner, will recommend to City Council the erection of plant for treating wood block pavement. Address The Mayor.

Atlanta, Ga.—Fruit Company.—Imperial Fruit Co. incorporated with \$13,000 capital stock by Nick Polo and others.

Baton Rouge, La.—Land Improvement.—Lake Park Improvement Co. incorporated with \$50,000 capital stock; E. L. Jordan, president, and E. W. Kerr, secretary.

Baton Rouge, La.—Land Improvement.—Denham Springs Realty Co. incorporated with \$100,000 capital stock; R. J. Hummel, president, and E. M. Heath, secretary.

Bayou Sara, La.—Reported that the Cumberland Telephone & Telegraph Co., Nashville, Tenn., will reconstruct its system in Bayou Sara.

Brownsville, Texas.—Grain Company.—Brownsville Grain Co. incorporated with \$5000 capital stock by A. E. Chapman, J. C. Wrexford and D. B. Kowalski.

Brunswick, Ga.—Steamer Transportation.—Brunswick & Fernandina Navigation Co. incorporated by L. Goldsmith, J. M. Armstrong, D. J. Gill, John C. Lehman and others to operate steamers between Brunswick and Fernandina, Fla.

Crowley, La.—Oil Wells.—Martin Oil Co. organized with \$100,000 capital stock to develop properties in Anse-la-Butte field; Dr. Francis R. Martin, president; Ames J. Martin, vice-president, and C. J. Samson, secretary-treasurer.

Crowley, La.—Oil Wells.—Carenco Oil Co. will be incorporated to develop 700 acres of oil land in the Anse-la-Butte field. Operations will begin at once; T. J. Toler, president; E. E. Broussard, first vice-president; F. C. Labit, second vice-president; Dr. Z. T. Francez, secretary, and Dr. E. M. Ellis, treasurer.

Cornellus, N. C.—Land Improvement.—Southern Real Estate, Loan & Trust Co., Charlotte, N. C., has purchased 182 acres of land between Cornellus and Davidson, N. C., which it will divide into building lots and manufacturing sites.

Elmwood, N. C.—Telephone System.—Amity Telephone Co. incorporated by J. T. Goodman and others to construct telephone system from Elmwood and Amity, N. C., to Statesville, N. C.

Farmville, Va.—Tobacco Storage.—Farmville District Prizing House Association, recently reported incorporated with \$50,000 capital stock, will engage in handling farmers' tobacco, drying out, prizing and selling; president, H. E. Richardson; vice-president, W. D. M. Stokes; secretary-treasurer, John C. Hamlett. Building equipped with machinery has been rented.

Franklin, La.—Oil Wells.—Orion Oil Co. incorporated with \$5000 capital stock to drill for oil; H. D. Smith, Jr., president, and J. H. Smith, secretary.

Greenville, Texas.—Publishing.—Banner Publishing Co. incorporated with \$15,000 cap-

Ital stock by F. E. Horton, H. P. Nelson and James Nelson.

Hazlehurst, Ga.—Oil and Gas.—South Georgia Oil, Gas & Development Co. will be incorporated to develop about 26,000 acres of oil and gas lands which it has leased. It expects to begin drilling in January. I. M. Kelly, Clarksburg, W. Va., president; T. R. Knight, secretary, and J. T. Knight, treasurer, both of Hazlehurst.

Heidelberg, Miss.—The S. C. Heidelberg Company incorporated with \$8000 capital stock by S. C. Heidelberg, J. O. Clayton, J. W. Rlgher and others.

Houston, Texas.—Oil Wells.—Ashiel-Smith Land Co. incorporated with \$10,000 capital stock to develop 1541 acres of oil lands; R. A. Welch, president; B. W. Armstrong, vice-president, and John H. McClung, secretary-treasurer.

Huntington, W. Va.—Land Improvement.—Harvey Improvement Co. incorporated with \$50,000 capital stock by W. J. Harvey, E. B. Enslow, Henry Simms and others.

Jackson County, Texas.—Oil Wells.—Jackson County Farms Co. incorporated with \$50,000 capital stock by A. C. Swanson, Houston, Texas; F. L. and C. W. Fuller of Cleveland, Ohio. Company will control about 4000 acres of oil lands in Jackson county.

Kansas City, Mo.—Construction.—Coulme & Bachman Construction Co. incorporated by William G. Coulme, Emil H. Bachman, W. G. Whitcomb and others.

Memphis, Tenn.—Elevator.—John Wade & Sons, 50 North Front street, will soon begin erection of grain elevator and warehouse; bulk capacity 90,000 bushels; equipped with power shovels for loading and unloading bulk grain and automatic sacking scale with capacity of six sacks per minute; total cost about \$30,000. Fred Friedline & Co., Chicago, Ill., is architect and builder. (Previously reported.)

Memphis, Tenn.—Concrete Construction.—General Concrete Construction Co. incorporated with \$10,000 capital stock by Carl Steller, W. F. Kachler, C. E. Davis and others.

Mobile, Ala.—Mobile County Sumatra Tobacco Association incorporated with \$10,000 capital stock to grow shade tobacco on 10 acres of land near Mobile; John Craft, president, and George Fearn, Jr., secretary-treasurer.

Mobile, Ala.—Shipping.—Gulf States Shipping Co. incorporated with \$10,000 capital stock to engage in general shipping. B. T. Barrett, president, and Joseph M. Walsh, secretary-treasurer.

Mt. Olive, N. C.—Drugs.—The Aarons Pharmacy incorporated with \$20,000 capital stock by D. J. Aaron and others.

Muskogee, Okla.—Oil Wells.—Slater Oil Co. incorporated with \$100,000 capital stock by Hal Belford and Fred A. Laine, both of Muskogee, and E. R. Perry, Tulsa, Okla.

Nashville, Tenn.—Printing Plant.—Union Printing Co., organized by W. H. Higginbotham & Son, will establish printing and binding plant; offices, 919 Commerce street.

New London, N. C.—Telephone System.—New London Development Co., incorporated with \$100,000 capital stock, has privilege of operating telephone lines. (See item under "Electric-Light and Power Plants.")

New Orleans, La.—Hardware.—Holbrook Hardware Co. incorporated with \$10,000 capital stock; C. E. Wernuth, president, and J. C. Cottman, secretary.

Norfolk, Va.—Cleaning and Dyeing.—Eclipse Cleaning & Dyeing Co. incorporated with \$25,000 capital stock; Albert Gerst, president; Otto Qells, vice-president, and Harry Nixdorf, secretary-treasurer.

Norfolk, Va.—Building Company.—Seventh Ward Building Co. incorporated with \$15,000 capital stock; W. L. L. Amerdin, president; J. J. Miller, vice-president, and F. R. S. Jeffries, secretary-treasurer.

Oklahoma City, Okla.—Construction.—Oklahoma Construction Co. incorporated with \$100,000 capital stock by J. E. Kirkes, J. C. Stebbins and E. J. Giddins.

Osage, Okla.—Oil Wells.—Osage Fifty-Eight Oil Co. incorporated with \$500,000 capital stock by A. R. Field, E. S. Lovett, Frank C. Hill, Donald Barker, all of Los Angeles, Cal., and others.

Paris, Tenn.—Publishing.—Parisian Publishing Co. incorporated with \$30,000 capital stock by J. D. Atkins, Z. T. Gatlin, E. T. Hall and others.

Parkersburg, W. Va.—Shoes.—White-Hull Shoe Co. incorporated to deal in boots and shoes; Wesley Hull, secretary, treasurer and manager. Company was recently incorrectly reported. (See "Machinery Wanted.")

San Antonio, Texas.—Oil Pipe Line.—Walsh Oil Co., H. T. Stalti, president, will construct six-inch pipe line from oil fields to San Antonio, a distance of about 12 miles. It is understood that piping has been contracted for. Loading racks will be constructed on the Southern Pacific and International & Great Northern railroads.

Shreveport, La.—Hardware and Mill Supplies.—Thomas-Davidson-Ogilvie Hardware Co. incorporated with \$200,000 capital stock to deal in general hardware and mill supplies; E. A. Thomas, president; R. J. Ogilvie, vice-president, and Fred Davidson, secretary-treasurer.

Shreveport, La.—Land Improvement.—Queensboro Construction Co., Ltd., J. Q. Stockley, president, 207-208 First National Bank Building, recently reported incorporated with \$25,000 capital stock, will engage in improvement of suburban property. (See under "Dwellings.")

St. Francisville, La.—Telephone System.—Reported that the Cumberland Telephone & Telegraph Co., Nashville, Tenn., will reconstruct its system in St. Francisville.

Tallahassee, Fla.—Tobacco.—Leon Gadsden Tobacco Co., recently reported incorporated with \$50,000 capital stock, will engage in growing shade tobacco for cigar wrappers; will make improvements to buildings and plant to amount of \$40,000; W. H. Covington, president; D. O. Neel, secretary.

Tarboro, N. C.—Supplies.—Robertson Supply Co. incorporated with \$50,000 capital stock by George Howard, J. C. Ruffin and E. L. Robertson.

Tarboro, N. C.—Hardware.—Howard Hardware Co. incorporated with \$50,000 capital stock by George M. Howard, R. M. Rawls and J. R. Thomas.

Tulsa, Okla.—Oil Wells.—Randolph Oil Co. incorporated with \$100,000 capital stock by J. S. Moffett, Rush N. Wallace and S. B. Seay.

Tulsa, Okla.—Oil Wells.—Grant Oil Co. incorporated with \$100,000 capital stock by E. R. Perry of Tulsa, J. R. Pratt and Sld O'Donnell, both of Muskogee, Okla.

Tulsa, Okla.—Tank Farm.—Prairie Oil & Gas Co. will establish tank farm, and will begin at once the construction of 27 55,000-barrel steel tanks.

Van Buren, Ark.—Fruit Growing.—Oakland Fruit Co. incorporated with \$25,000 capital stock; S. W. Stewart, president; W. H. H. Shibley, vice-president; R. P. Allen, secretary, and Carl Shibley, treasurer.

West Palm Beach, Fla.—Amusement Company.—Florida Amusement & Improvement Co. incorporated with Jeremiah Howard Nixon, president, and George G. Currie, secretary-treasurer.

Wheeling, W. Va.—Land Improvement.—North Wheeling Land & Improvement Co. incorporated with \$50,000 capital stock by Mrs. Margaret McCoy, Mrs. Caroline G. Tallman, Miss Minnie E. Gilchrist, all of Wheeling; Henry D. Gilchrist, Pittsburg, Pa., and others.

Yellow Spring, W. Va.—Orchard.—Buckeye Orchard Co. incorporated with \$25,000 capital stock to cultivate fruits, etc., by Frank B. Miller, William W. Bally, J. Dice Hanna and others.

**MISCELLANEOUS MANUFACTURING PLANTS**

Arvonla, Va.—Slate Manufacturing.—James River Slate Co., owning 200 acres of slate lands near Arvonla, contemplates manufacturing the slate quarried into roofing slate, door sills and other building materials. (See item under "Mining.")

Atlanta, Ga.—Drug Factory.—Brasletton Drug Co. incorporated with \$10,000 capital stock by Amos W. Brasletton and L. S. Brasletton.

Baltimore, Md.—Iron-bed Factory.—Southern Bedding Co. incorporated with capital stock of \$10,000 to manufacture iron and brass beds, woven-wire mattresses, etc., by Arthur F. Carpenter, Rome, N. Y.; George W. Latimer, New York city; E. P. Keech, Jr., M. Ernest Jenkins and J. Walter Lord, all at 900 Maryland Trust Building, Baltimore. The plant will be operated by interests which control Rome Metallic Bed Co., Rome, N. Y., and have leased building at 629-633 West Pratt street, will immediately prepare it for their purposes and install necessary machinery and equipment.

Baton Rouge, La.—Sugar Manufacturing, etc.—Dougherty-Glannelloni Sugar Co. incorporated with \$50,000 capital stock to manufacture sugar, molasses, candy, etc.; S. J. Glannelloni, president, and A. P. Daspit, secretary.

Baton Rouge, La.—Syrup Factory.—Louisiana Pure Syrup & Supply Co., Ltd., incorporated with \$100,000 capital stock; J. L. Roling, president, and E. E. Israel, secretary.

Birmingham, Ala.—Cigar Factory.—Ward

Douthitt Cigar Co. incorporated, with Charles O. Douthitt, president, and Henry A. Ward, secretary-treasurer.

Carthage, Mo.—Powder Works.—Economic Explosive Co. incorporated with \$50,000 capital stock by O. F. Malcoln, J. P. Newell and J. V. Koontz.

Charleston, S. C.—Fertilizer Factory.—Combahee Fertilizer Co. contemplates increasing capital stock from \$100,000 to \$250,000 and building either a new and larger factory or an addition to its acid works; F. Q. O'Neill, president. (Company was recently mentioned to erect manufacturing plant to replace burned factory.)

Christiansburg, Va.—Lime Works.—Alleghany Lime Co., recently noted organized to purchase and operate plant of Montgomery Lime Co., contemplates installation of additional kiln and possibly a hydrating plant; president, J. L. Vaughan, Roanoke, Va.; vice-president, R. J. Hamilton, Cambria, Va.; secretary and treasurer, A. A. Phlegar. Mr. Phlegar has charge of purchasing supplies and general supervision. (See "Machinery Wanted.")

Columbus, Ga.—Fertilizer Factory.—Georgia Fertilizer Co., John T. Fletcher, president, will increase capital stock from \$200,000 to \$300,000 and have an authorized capitalization of \$400,000. Object of the increase is to pay for the new plant, previously detailed, which is now about completed.

Denton, Md.—Cannery.—C. H. Whitby & Son have purchased the Denton Canning Co.'s plant.

Draper, Va.—Milling.—Rex Milling Co. incorporated with \$25,000 capital stock; D. M. Painter, president; G. H. Gilmer, vice-president, and P. G. Pratt, secretary.

Fleeton, Va.—Canning Plant.—C. E. Davis Packing Co., recently reported incorporated, will establish factory for canning salt herring and herring roe; will erect buildings 40x150 feet and 30x30 feet; cost of buildings and equipment about \$4000; president, C. E. Davis; secretary and treasurer, J. A. Palmer, Jr.

Greensboro, N. C.—Musical Instruments.—Phillip E. Clayton, Johnson City, Tenn., will establish plant in Greensboro for manufacturing a new musical instrument.

Greenwood, Miss.—Mattress Factory.—Gatesville Mattress Co. incorporated with \$25,000 capital stock by W. T. Loggins, N. S. Wright and others.

Hallettsville, Texas.—Creamery.—L. D. Lacey, Rock Island, Texas, has completed and is now operating proposed creamery at Hallettsville which is equipped with churner having a capacity of 472 pounds. (Mentioned in October.)

Hereford, Texas.—Flour Mill.—Weatherford Milling Co. has been organized with \$25,000 capital stock to establish flour mill. Guy Weatherford, Unionville, Ill., is president.

Holden, Mo.—Chemical Works.—Missouri Chemical Co. incorporated with \$30,000 capital stock by T. J. Nay, Oliver E. Wallace and I. B. May.

Houston, Texas.—Overall Factory.—R. M. Chapman Manufacturing Co., previously reported incorporated with \$25,000 capital stock, has secured building which it is remodeling and equipping for manufacturing overalls. It is expected that operations will begin about January 1. F. E. Pye is president and W. C. Munn vice-president, both of Houston, and R. M. Chapman, Prairie du Chien, Wis., manager. Mr. Chapman will locate in Houston, and is now supervising installations.

Kansas City, Mo.—Alfalfa Mill.—Topeka Alfalfa Milling Co., Fred H. Webster, president, Topeka, Kan., contemplates establishing plant near Kansas City for grinding alfalfa and manufacturing alfalfa meal.

Kansas City, Mo.—Manufacturing.—Edgar Manufacturing Co. incorporated with \$20,000 capital stock by Charles E. Edgar, F. E. Nettleton and E. B. Nettleton.

Kosciusko, Miss.—Cotton-Oil Mill.—Kosciusko Oil Mill & Fertilizer Co. (W. B. Potts, president), recently noted to restore plant partially destroyed by fire, will erect brick cotton-oil mill at cost of about \$15,000; architect, engineer and manager, J. O. Ashworth; manufacture cottonseed products. (See "Machinery Wanted.")

Macon, Ga.—Fertilizer Factory.—Macon Fertilizer Works, recently reported incorporated, is successor to Jones & Roberts Fertilizer Works; Baxter Jones, secretary and treasurer. Fertilizer mixing plant has daily capacity of 150 tons.

Memphis, Tenn.—Bakery.—Sizeler Baking Co. incorporated by William Sizeler, I. H. Peres, John Jones and others.

Mobile, Ala.—Creamery.—Mobile Creamery Corporation incorporated with \$5000 capital stock by E. Graf, C. D. Groeschner, J. S. Gayle and others.

Montezuma, Ga.—Cigar Factory.—Montezuma Cigar & Tobacco Co. organized by J. Lopez and others to manufacture cigars. About 15 acres will be planted in tobacco.

Muskogee, Okla.—Paint and Glass Works.—Muskogee Paint & Glass Co. incorporated with \$15,000 capital stock by C. L. Dickman, W. I. Green, Joseph A. Dickmann and others.

Natchez, Miss.—Collar and Harness Factory.—Natches Pneumatic Collar & Harness Co., recently reported organized to establish collar and harness factory, will erect two-story building 100x30 feet; necessary equipment will be installed; will manufacture pneumatic collars, harness, pads, etc.; president, W. D. Elliott; secretary and treasurer, G. Davis; general manager, W. E. Wren. (See "Machinery Wanted.")

New Orleans, La.—Manufacturing.—The Electric Manufacturing Co. incorporated with \$25,000 capital stock; George W. Logan, president; Warren B. Reed, vice-president, and E. S. D. Logan, secretary-treasurer.

Norfolk, Va.—Shoe Factory.—Reported that the Wingo-Eliett-Crump Shoe Co. (operating two plants, one in Norfolk and the other in Manchester, Va.) has been purchased by a syndicate. It is stated the plant in Norfolk will be enlarged.

Paducah, Ky.—Reducing Plant.—City is considering a proposition submitted by M. F. Van Buskirk, president of the United States Construction & Utilization Co., Rochester, N. Y., and the engineer, F. G. Wiseloge, for the construction of a reducing plant in which to convert garbage into fertilizer and soap fats. Company proposes to erect a concrete building equipped on the unit plan with a daily capacity of 10,000 tons, which it will give to the city under a guaranty for \$30,000, or will operate the plant itself, city paying \$3500 annually.

Pulaski, Tenn.—Flour Mill.—Pulaski Cotton & Grain Co. will not at present rebuild milling plant reported burned in September. (Recently noted to be rebuilt.)

Quincy, Fla.—Tobacco Factory.—Gadsden Sumatra Tobacco Co. incorporated with \$30,000 capital stock; B. H. Hardaway, president, and W. M. Manly, secretary-treasurer.

Richmond, Va.—Varnish Factory.—Atlantic Varnish Co. will erect furnace-room to cost \$3500.

Roanoke, Va.—Marble and Granite Works.—Roanoke Marble and Granite Works incorporated with \$10,000 capital stock; W. L. Andrews, president; M. E. Muire, vice-president, and J. E. Boon, secretary-treasurer.

Rome, Ga.—Marble Works.—H. P. Colvard, Dalton, Ga.; J. H. Taylor, E. P. Treadaway, John Graham and others, all of Rome, Ga., have organized company with \$10,000 capital stock to establish marble works in Rome.

Rudy, Ark.—Cannery.—Ozark Mountain Canning Co. organized with \$5000 capital stock to establish cannery; Charles Shuey, president, and William Chesterfield, secretary.

Somerset, Ky.—Flour Mill.—Somerset Mill Co. has made no plans for rebuilding mill recently reported burned.

Stamford, Texas.—Sugar Mill.—Reported that American Sugar Beet Co., Rocky Ford, Col., contemplates establishing sugar mill in Stamford.

St. Louis, Mo.—Jewelry.—Lee-Kehr Manufacturing Co. incorporated with \$18,000 capital stock to manufacture and deal in jewelry, silverware and novelties by Arthur J. Lee, Frederick A. Kehr and H. S. Aller.

St. Louis, Mo.—Novelties.—Rankin Novelty Advertising Co. incorporated with \$5000 capital stock by Robert M. Rankin, Richard T. Zoeller and Thomas J. Rankin to manufacture novelties, etc.

St. Petersburg, Fla.—Manufacturing.—Reported that M. H. Avram, New York, N. Y., contemplates establishing manufacturing plant in St. Petersburg, investing about \$25,000; T. E. Lucas, Tampa, Fla., representative.

## RAILWAY SHOPS, TERMINALS, ROUNDHOUSES, ETC.

Roanoke, Va.—Reported that John P. Pettyjohn, Lynchburg, Va., has secured contract to erect repair shops for the Norfolk and Western Railway. (Recently mentioned.)

## ROAD AND STREET IMPROVEMENTS

Baltimore, Md.—Board of Awards, City Hall, will receive bids until December 27 to pave portion of Konig street with bitulithic sheet asphalt, asphalt blocks or vitrified brick. (See "Machinery Wanted.")

For Washington, Md.—Contract will be awarded January 10 at office of Constructing Quartermaster, U. S. Army, for resurfacing macadam roads. (See "Machinery Wanted.")



Long Beach, Miss.—City will vote on issuance of \$10,000 of bonds for street improvements. Address The Mayor.

Palatka, Fla.—Graves-Shales Paving Brick Co., Birmingham, Ala., has contract for grading and paving with vitrified brick about 22,806 square yards of surface at \$1.54 per square yard; granite concrete and gutter, plain, 40c. per linear foot; concrete steel-protected curb and gutter, plain, 59c. per linear foot, and concrete steel-protected in-lar and gutter, plain, 69c. per linear foot. E. C. Crill and G. E. Gay, secretary, Board of Bond Trustees. (Recently mentioned.)

Tryon, N. C.—Tryon Township Highway Commission will award contract December 24 for grading 1½ miles of road, a bond issue of \$12,000 being recently reported as voted for road macadamizing; B. L. Ballinger, secretary. (See "Machinery Wanted.")

### SEWER CONSTRUCTION

Burlington, N. C.—City has selected Gilbert C. White, Durham, N. C., as engineer in charge of installation of sewerage and water-works, for which \$100,000 of bonds was recently reported voted; Mayor, A. F. Barrett.

Columbia, Miss.—City has voted \$50,000 of bonds for construction of sewerage system and water-works. Address The Mayor. (Recently mentioned under "Water-Works.")

Galveston, Texas.—Kelso & Vautrin have been awarded contract at \$17,735.08 for construction of reinforced concrete storm drain, 42x66 feet, on Nineteenth street; A. T. Dickey, City Engineer. (Recently mentioned as lowest bidders.)

Joplin, Mo.—Burns & McDonnell, engineers, Kansas City, Mo., have prepared plans for proposed sewerage system at Joplin. (City was reported in August to vote on issuance of \$47,000 of bonds for sanitary sewers and \$15,000 for storm sewers.)

Maxton, N. C.—City has voted bonds for sewerage and water-works; engineer, J. M. Handy, Greensboro, N. C.; Mayor, R. M. Williams. (Mentioned in October.)

Wadesboro, N. C.—Sewer-construction work will begin December 16; engineer, J. M. Handy, Greensboro, N. C.; J. F. Allen, chairman Sewer Commission.

### TEXTILE MILLS

Bristow, Va.—Cotton Hosiery.—National Hosiery Co. organized to establish mill; E. L. Hornbaker, president, and George D. Baker, treasurer.

Charlotte, N. C.—Cotton Yarns.—Sargeant Cotton Manufacturing Co. incorporated with capital stock of \$5000 by Sumner B. Sargeant, Edward L. Sargeant and J. M. Harry. (Late-ly mentioned as proposed; will probably have 500 spindles.)

Davidson, N. C.—Cotton Yarns.—Delburg Cotton Mills is planning to determine all details and proceed with construction and equipment of proposed plant. This company reported organized last July with capital stock of \$100,000 to build 2500-spindle yarn mill. J. P. Munroe is president.

Fairmont, S. C.—Cotton Sheeting.—Tyger Cotton Mills will build another plant, to cost about \$300,000. Company has purchased water-power property at \$10,000, which will be developed to transmit power for the mill. Present equipment is 8132 ring spindles and 256 looms manufacturing sheeting.

Kernersville, N. C.—Cotton Blankets.—Crews Manufacturing Co. is reported as about to remodel its plant, erect additional building and install new machinery to largely increase capacity.

Lexington, S. C.—Knit Goods.—L. W. Redd will build knitting mill; from 30 to 50 machines to be installed.

Madisonville, Tenn.—Knit Goods.—Thomas Upton is reported as forming company with capital stock of \$15,000 to build knitting mill.

Mooresville, N. C.—Cotton Yarns.—Dixie Cotton Mills is completing plant detailed some months ago. Additional facts are as follows: Mill structure 100x100 feet, boarded on end to permit of future extension; carding-room on first floor; spinning-room on second floor; picker building, one story, 27x100 feet; dyehouse, one story, 30x100 feet; buildings cost about \$35,000; machinery (all contracts awarded, about \$44,000) to include 5000 spinning spindles and 2400 twister spindles; daily capacity 1100 pounds of 24s to 30s single or ply yarns; architect in charge, Sylvester Denney; president of company is E. W. Brawley.

Mount Airy, N. C.—Cotton Yarn.—Laurel Bluff Cotton Mills, J. L. Brown, proprietor, contemplates installing 2000 modern spindles to replace old equipment for manufacturing 14s to 24s cotton yarns. This new machinery has not been purchased. (See "Machinery Wanted.")

North Augusta, S. C.—Cotton Hosiery.—T. L. Foreman will establish the Dixie Knitting Mills for manufacturing hosiery; will use electricity for power; details being considered.

### WATER-WORKS

Atlanta, Texas.—The city is desirous of granting franchise for the construction of water-works and invites capitalists to investigate; population about 2500. For particulars address The Mayor.

Burlington, N. C.—City will install water-works and sewerage, for which \$100,000 of bonds was recently reported voted; Gilbert C. White, Durham, N. C., has been selected as engineer; Mayor, A. F. Barrett.

Childress, Texas.—City will install water-works, for which \$15,000 of bonds were recently reported voted; Joseph H. Aynesworth, secretary. (See "Machinery Wanted.")

Columbia, Miss.—City has voted \$50,000 of bonds for construction of water-works and sewerage system. (Recently mentioned.) Address The Mayor.

Corpus Christi, Texas.—City will purchase water-works from the Corpus Christi Water Supply Co. at \$35,000.

Maxton, N. C.—City has voted bonds for water-works and sewerage; engineer, J. M. Handy, Greensboro, N. C.; Mayor, R. M. Williams. (Mentioned in October.)

Morehead, Ky.—City contemplates construction of water-works to cost about \$15,000. Address The Mayor.

Terra Alta, W. Va.—Terra Alta Water-Works Co. incorporated with \$10,000 capital stock by W. T. White, Parley DeBerry, T. J. Pickling and others.

### WOODWORKING PLANTS

Black Rock, Ark.—Boxes, etc.—Dunckel Box & Lumber Co. is making improvements to its plant, including installation of two 150-horse-power boilers and a carriage and steam log-loader, which will increase capacity from 20,000 feet daily to 35,000 feet.

Decatur, Ala.—Barrel Heading.—N. B. Hall & Sons, recently noted to replace burned plant, will build two-story frame structure, 40x60 feet; will also erect drykiln 120 feet in length, storage shed, etc.; plans by N. B. Hall; product, slack-barrel heading; machinery has been purchased.

Fort Worth, Texas.—Boxes.—Factory Club, A. N. Evans, secretary, has interested capitalists in the organization of company to establish box factory, investing about \$10,000.

Georgia.—Staves.—John H. Gorsuch will establish stave factory in Georgia. (See item under "Lumber-Manufacturing Plants.")

Harrisburg, Ark.—Handle Factory.—Harrisburg Hardwood Lumber & Handle Co., recently reported organized, will establish planing mill and handle factory; handle capacity, 40 dozen per day; manager, J. A. Davis; engineer, T. R. Shepard. (See "Machinery Wanted.")

Henderson, Ky.—Chair Factory.—Henderson Chair Co. is name of company recently noted to be established by Hillsboro Chair Factory of Hillsboro, Ohio; plant to have capacity of 50 dozen chairs per day; company will erect brick building 63x200 feet and install machinery; cost of building \$10,000; cost of machinery \$9000; president, W. F. Welmer; vice-president, S. M. Haley; engineer, John Clark, Hillsboro, Ohio; architect, James Western. (See "Machinery Wanted.")

Monroe, La.—Rims, Spokes, etc.—Company will be organized with \$15,000 capital stock by Isaac Scott, Ruston, La.; Samuel Rogers, Fort Payne, Ala., and others to establish plant for manufacturing rims and spokes for wagon wheels, pick and ax handles, etc.

Norfolk, Va.—Wood Paving Blocks.—Thos. B. Punshon, engineer and surveyor; P. F. Welmer and Clinton Cowan, all of Cincinnati, Ohio, are reported as being interested in establishment of wood-preserving plant and plant for manufacturing paving blocks in Norfolk.

Obion, Tenn.—Heading.—Obion Cooperage Co. will rebuild plant recently reported burned; will erect drykiln, 26x120 feet, 14 feet high, of brick and sheet iron, with asbestos roofing and ceiling; cost of building \$2500; cost of machinery \$2500; to manufacture slack-barrel heading; capacity 15,000 pieces heading or 3000 sets per day; supplies purchased; H. L. LaNieve, secretary and manager.

Vicksburg, Miss.—Oars.—Wilsey & Shaffer Manufacturing Co., 63 West street, New York, N. Y., will establish oar factory recently mentioned; A. F. Shaffer, manager and engineer in charge. Frame building will be erected and machinery installed at cost

of \$8000; machinery contracted for; product, boat oars, 2,000,000 feet timber per year.

Wichita Falls, Texas.—Furniture and Coffins.—North Texas Furniture & Coffin Co. incorporated with \$30,000 capital stock by L. H. Lawler, George Davis and K. A. White.

### BURNED

Alexandria, Tenn.—Bank of Alexandria; store buildings of Dr. C. B. Baird, Eaton & Atkins, L. Tubb & Son, Granville Lester and C. A. Womack; Willow House, B. F. Bell, proprietor; total loss about \$30,000.

Chick Springs, S. C.—Chick Springs Hotel Co.'s hotel; J. A. Bull, president; loss \$30,000.

Conyers, Ga.—T. J. Jones' ginhouse.

Conyers, Ga.—W. H. Lee & Son's building; loss about \$23,000.

Elizabethtown, Ky.—J. C. Garrett's residence; loss about \$7000.

Elkins, W. Va.—The Elkins Hotel; R. M. Trickett, proprietor; Thomas Donohoe, owner.

Fayetteville, Tenn.—H. K. Holman Grain Co.'s cob mill; loss \$15,000.

Florence, Ala.—P. B. White's cotton gin; loss about \$1500.

Fordwick, Va.—Virginia Portland Cement Co.'s power-house destroyed by accident.

Fort Mitchell, Ala.—Central of Georgia Railway Co.'s freight depot; loss about \$35,000; C. K. Lawrence, chief engineer, Savannah, Ga.

Fredericksburg, Va.—U. S. Walters' barn; loss, \$7000.

Gibland, La.—A. Rhode's sawmill and cotton gin.

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Huntington, W. Va.—Williams Bros.' livery barn; Prindle Bros.' storage warehouse; total loss about \$15,000.

Jefferson City, Mo.—Building owned by Joseph Pope and leased by Central Broom Co., collapsed; loss \$30,000.

Jonesville, La.—John A. Guss' cotton gin.

Lexington, N. C.—Taylor-Mendenhall Company's store building, owned by R. B. McCrary.

New Orleans, La.—Tulane Shoe Store, Kelfer Bros., owners; estimated loss \$100,000.

Ocean View, Va.—Mrs. W. H. Evans' cottage; loss \$5500. E. A. Page's cottage; loss about \$3500.

Pawnee, Okla.—One-Price Cash House, loss \$30,000; Globe Hotel, loss \$9000; Mentzer Bros.' store building, loss \$8500; Weinberg Dry Goods Co.'s building, loss \$25,000.

Pembroke, Ky.—A. O. Dority's tobacco re-handling house; loss \$25,000.

Petersburg, Va.—William Budd Furniture Co.'s store building, owned by Miss Maud Taylor; loss \$10,000.

Picayune, Miss.—A. Piers' residence and store; loss \$3000. W. M. Buckley's store building.

Pilot Point, Texas.—Light Bros.' warehouse; loss \$4000.

Sedalia, Mo.—Sedalia Woolen Mills; loss \$55,000.

Taylor, Texas.—District Farmers' Union Warehouse Co.'s warehouse; loss on building about \$6000.

Poplarville, Miss.—Glade Lumber Co.'s sawmill and drykilns; estimated loss \$25,000.

### BUILDING NOTES

\*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery, Proposals and Supplies Wanted."

### APARTMENT-HOUSES

Baltimore, Md.—Atonzo M. Hurlock, 224 St. Paul street, will erect eight or nine-story fireproof apartment-house at northwest corner Eutaw place and Dolphin street to cost about \$175,000.

Baring Cross, Postoffice Little Rock, Ark.—Mord Roberts, 211 West 2d street, Little Rock, Ark., will open bids January 4 for erection of apartment-house recently mentioned; frame; two stories, 44x58 feet; concrete foundations and porch floors; 14 rooms; halls and bathrooms; plumbing, gas and electric lighting; cost \$7000; plans by J. M. Whitehead, 801-802 Southern Trust Building, Little Rock, Ark.

Jacksonville, Fla.—C. A. Colclough, Gainesville, Fla., awarded contract to Richard Slishe, Jr., for erection of apartment-house recently mentioned; plans by J. H. W. Hawkins; 46x100 feet; four flats; ordinary construction; fireplaces; gas and electric lighting; cost \$13,000.

St. Louis, Mo.—Charles A. Kalbfell, 1406 Linton avenue, will erect two-story flat building; 14x52 feet; gaslighting; cost \$3500; plans by Otto J. Boehmer, Holland Building; work to be done by owner.

St. Louis, Mo.—Trade Realty & Building Co., 717 Chestnut street, will erect apartment-house; to be of brick and stone, two stories high and contain 10 flats.

St. Louis, Mo.—Otto J. Krieg will prepare plans and specifications for erection of two apartment-houses; two stories; brick and stone; gas and electricity.

St. Louis, Mo.—Gratiot Building Co. will erect store and apartment-house; two stories; brick and stone; V. J. Klutho, architect.

St. Louis, Mo.—R. Haberstroh, 4216 Kennerly avenue, awarded contract to Joseph Schaefer for erection of apartment-house recently mentioned; plans by Joseph D. Donovan, 8301 Lucille avenue; size, 47x134½ feet; gas and electric lighting; cost \$17,500.

### BANK AND OFFICE BUILDINGS

Jacksonville, Fla.—Florida Grand Lodge of Masons, E. E. Haskell, Palatka, Fla., grand master, has awarded contract to H. P. Helfner, Atlanta, Ga., at \$125,000 for erection of proposed temple and office building; seven stories and basement; 60 rooms; 80x105 feet; reinforced concrete; front and one side faced with pressed brick and trimmed with terracotta; fireproof; classic style of architecture; arcade through center. L. M. Weathers Company, Cotton Exchange Building, Memphis, Tenn., has prepared plans and L. M. Weathers will be supervising architect; Geo. L. Drew, secretary building committee, 106 Main street. (Mentioned in September.)

Port Arthur, Texas.—Port Arthur Land & Townsite Co., Jan Van Tyen, manager, will erect office building; one story; brick; cost \$3000. Plans have been prepared.

St. Louis, Mo.—Caldwell & Drake, Columbus, Ind., contractors for erection of proposed 19-story fireproof building for LaSalle Investment Co., contemplate beginning construction work soon after January 1. Steel for structure is being manufactured at Caldwell & Drake Iron Co.'s works at Columbus, Ind., and is being rolled at works of Cambria Steel Co., Cambria, Pa. Plans for the building were prepared by H. A. Roach.

Weathersby, Miss.—Merchants and Farmers' Bank will erect brick bank building.

### CHURCHES

Fortuna, Mo.—Mennonite congregation will erect church; frame; 50x70 feet; Edward A. Strong, Katie Building, Sedalia, Mo., architect; Rev. D. B. King, pastor.

Eufaula, Ala.—First Baptist congregation has awarded contract to B. E. Hudson, Atlanta, Ga., for erection of edifice to cost about \$30,000.

Eunice, La.—Catholic Congregation will let contract December 25 for edifice recently noted to be erected; as proposed, building will be of mill construction; 60x125 feet; steeple; cost, \$10,000; Rev. L. Laroche, pastor. (See "Machinery Wanted.")

Gastonia, N. C.—West End Methodist congregation will have plans and specifications prepared for erection of edifice to cost \$4000; Rev. J. Calvin Harmon, pastor.

Griffin, Ga.—First Baptist Church has engaged Bruce & Everett, Atlanta, Ga., to prepare plans for Sunday-school addition, to cost \$10,000.

Hughesville, Mo.—M. E. Church South will erect edifice; contract awarded to J. M. Ramsey; plans by Edward A. Strong, Sedalia, Mo.; 54x74 feet; frame; hot-air heating; gas lighting; cost \$6000.

Louisville, Ky.—Fourth Avenue Presbyterian congregation is having plans prepared by Kenneth McDonald & W. J. Dodd, Lincoln Bank Building, for chapel; brick; cost about \$25,000.

Mansfield, La.—Methodist congregation has had plans prepared for erection of edifice to cost about \$20,000. It is understood that bids are now invited. Address The Pastor, Methodist Church.

San Antonio, Texas.—Sisters of Divine Providence have had plans prepared by Fred B. Gaenslen, 209 West Commerce street, for erection of church to cost about \$50,000.

West Point, Miss.—J. E. Caruthers will erect church building.

### COURTHOUSES

Berkeley Springs, W. Va.—E. C. Moser, Hagerstown, Md., has contract to install plumbing and heating in new Courthouse at Berkeley Springs, previously described. S. A. Westenhaver, Martinsburg, W. Va., general contractor; Holmboe & Lafferty, Clarksburg, W. Va., architects.

El Paso, Texas.—El Paso county will vote January 4 on issuance of \$28,000 of bonds for erection of three-story annex to courthouse. Address County Commissioners.

Selma, Ala.—King Lumber Co., Charlottesville, Va., has contract at \$108,775 for erection of courthouse and postoffice in Selma; stone; press brick and terra-cotta; fireproof; steam heat; electric and gas lighting. Contract calls for completion by May 1; James Knox Taylor, supervising architect, Washington, D. C. Building was mentioned in October. (See "Machinery Wanted.")

Tulsa, Okla.—Tulsa county contemplates issuing bonds for erection of courthouse to cost about \$100,000. Address County Commissioners.

### DWELLINGS

Baltimore, Md.—Joseph E. Franklin, builder, 2503 Fairmount avenue W., will erect 11 two-story brick dwellings with marble trimmings and modern conveniences at Payson and Franklin streets.

Bessemer, Ala.—Mrs. E. Goode is having plans prepared by J. W. McClain, Birmingham, Ala., for erection of two-story residence to cost about \$7000.

Chattanooga, Tenn.—D. P. Montague will erect residence; two stories; 12 rooms; brick; cost about \$3000; S. E. Adams, contractor.

Columbia, S. C.—Black & Coulter Company, 1410 Main street, contemplates erection of 36 residences.

Gadsden, Ala.—Charles O. Duncan has awarded contract to W. H. Mayben for erection of residence to cost \$2500.

Kansas City, Mo.—J. O. Wade, New York Life Building, is considering erection of four residences; brick veneer; two stories.

Kansas City, Mo.—H. E. Brann, 906 Scarritt Building, awarded contract to W. C. Johnson, 2612 Garfield street, for erection of brick and stucco residence to cost between \$8000 and \$9000; plans by R. E. Lane, Waco, Texas; 25x47 feet, with additions; hot-air heating; combination lighting.

Louisville, Ky.—Mrs. H. R. Whiteside will erect residence, two stories, brick veneer; Maury & Hillerich, Board of Trade Building, architects.

Portsmouth, Va.—Portsmouth Residence Corporation incorporated with \$10,000 capital stock; Philip Allett, president, and H. D. Ward, vice-president; will build residences costing from \$1800 to \$10,000.

Shepherdstown, W. Va.—Reported that E. C. Moser, Hagerstown, Md., has contract to install plumbing and heating in \$30,000 residence of Henry W. Potts at Shepherdstown.

Shreveport, La.—Queensboro Construction Co., Ltd., 207-208 First National Bank Building, recently reported incorporated with \$25,000 capital stock, will engage in improvement of suburban property; will build one and two-story houses costing from \$1000 to \$3000; president, J. Q. Stockley; vice-president, J. M. Rolloson; secretary-treasurer, F. A. Rolloson.

St. Louis, Mo.—J. G. Zimmerer, 613 Chestnut street, will have plans prepared by E. Priesler, 910 Pine street, for erection of three residences; two stories; 25x50 feet; brick and stone.

St. Louis, Mo.—J. B. Strauch will have plans prepared by William G. Gruen, Chemical Building, for erection of residence; brick and stone; gas and electricity; cost about \$12,000.

St. Louis, Mo.—E. P. Schwerdtman will erect two-story residence at a cost of about \$12,000 after plans prepared by Gustav P. Wuest, Wainwright Building.

St. Louis, Mo.—A. K. Humphry will erect two residences; two stories; 25x35 feet; brick and stone; plans by A. F. Haussier, 510 Pine street.

St. Louis, Mo.—J. B. Wright is having plans prepared by R. D. Weakley, Missouri Trust Building, for erection of brick and stone residence costing about \$10,000.

St. Petersburg, Fla.—L. C. Schwerdtferger, Lincoln, Ill., will erect residence in St. Petersburg.

Sylacauga, Ala.—Dr. H. L. Castleman will erect residence recently mentioned at cost of \$4000; J. W. McClain, architect; contract awarded; 10 rooms; brick veneer; hot-air heating; electric lighting.

Washington, D. C.—Clarke Waggaman, 2000 Connecticut avenue N. W., will erect three-story brick and stone dwelling, with modern conveniences, at 2517 Connecticut avenue N. W., to cost \$12,000. Owner is builder. He will also erect three-story dwelling at 2519 Connecticut avenue N. W. for Agnes W. Willett, to cost \$9000.

Washington, D. C.—Mrs. A. M. Gantz has awarded contract to F. P. Morgan for construction of four three-story brick dwellings

with modern conveniences at 153-150 Randolph place N. W., to cost \$15,000; N. T. Haller Company, architect, Corcoran Building, 15th and F streets N. W.

Washington, D. C.—Waddy B. Wood of Wood, Donn & Deming, architects, 808 17th street N. W., will erect dwelling for himself on Q street, near Connecticut avenue N. W.; three stories and basement; 20x60 feet; Indian limestone exterior; modern conveniences.

Washington, D. C.—John R. Halslip, builder, 1406 Montello avenue N. E., will erect five two-story brick dwellings with modern conveniences at 109-117 P street N. W., to cost \$13,000.

Washington, D. C.—Harry Wardman, builder, 1333 G street N. W., will erect nine two-story brick and frame dwellings at 4001-4017 14th street N. W., and eight two-story brick and frame dwellings at 3917-3931 14th street N. W., to cost \$26,000. Modern conveniences will be installed; A. H. Beers, architect, 1333 G street N. W.

Washington, D. C.—Harold E. Doyle, Reno road N. W., has awarded contract to John Brennan, 946 Florida avenue N. W., for construction of two two-story frame dwellings with modern conveniences at 3759 McKinley street N. W. and 3750 Northampton street N. W., to cost \$10,000; A. M. Schneider, architect, Bond Building.

Washington, D. C.—Alexander Millar, builder, 1215 Ohio avenue N. W., will erect five two-story brick dwellings with modern conveniences at 3642-3650 11th street N. W., to cost \$19,000.

Washington, D. C.—Martin H. Bray, builder, 1414 N street N. W., will erect two frame dwellings with modern conveniences at 1403 Delafield place N. W. and 1409 Decatur street N. W., to cost \$6000; Matthew G. Lepley, architect, Bond Building, 14th street and New York avenue N. W.

### HOTELS

Alexandria, La.—Construction work is progressing on hotel being erected for Joe Bentley by the Hull Construction Co., Jackson, Miss., after plans by George R. Mann, Little Rock, Ark. Structure will be six stories high, 200x100 feet; brick and stone; contain about 200 rooms; 170 baths; steam heat; two passenger and one freight elevators; cost \$350,000. (Previously mentioned.)

Cornelius, N. C.—Noah Winecoff will erect brick hotel.

Frederick, Md.—D. Columbus Kemp, Chas. C. Waters, Dr. Franklin B. Smith and others, who have acquired 80 acres of land near Yellow Springs, will erect hotel and develop the property as health resort.

Houston, Texas.—Reported that George W. Peck, Milwaukee, Wis.; George A. Lougee and C. F. Cooley, both of Madison, Wis.; W. A. Forbes, Rockford, Ill., and others are interested in erection of a hotel 250x100 feet.

Lewisburg, W. Va.—Lewisburg Hotel Co. incorporated to erect hotel by H. L. Van Sickler and others.

### MISCELLANEOUS STRUCTURES

Alexandria, La.—Business Building.—Geo. A. Roberts has purchased site with 90-foot frontage for \$22,500 on which to erect brick building.

Austin, Texas.—Asylum.—State awarded contract to Ledbetter & Mundt for erection of two additions to ward buildings of State Lunatic Asylum; plans by C. H. Page, Jr., & Bro.; brick construction; steam heat; electric lighting; cost, \$22,000; steam-heat contract awarded to John R. Donnelly. (Recently mentioned.)

Augusta, Ga.—Hospital.—Company will be organized with \$50,000 capital stock to erect general hospital, constructed in the pavilion style. Children's Hospital Association will appropriate \$10,000 for erection of children's annex. Medical College of the University of Georgia, Dr. Joseph E. Allen, dean, and Joseph R. Lamar, chairman board of trustees, is interested.

Austin, Texas.—Hospital.—State Institute for the Deaf will erect hospital; hot-water baths; electric lighting; cost \$6500; contract for construction work awarded to Watterson & Shurr, and for plumbing, steamfitting, heating and electrical work to John L. Martin. Construction work will soon begin.

Baltimore, Md.—Store Buildings.—Safe Deposit & Trust Co., 9-13 South street, will erect store building at 2, 4 and 6 North Howard street; three stories; 46x57 feet; brick with stone trimmings; structural iron and steel; modern conveniences. B. F. Bennett, 123 South Howard street; Thomas B. Stanfield & Son, 109 Clay street; Thomas L.

Jones & Son, 410 West Saratoga street, and J. H. Miller, 110 Dover street, are estimating on construction; bids to be in December 26; Mottu & White, architects, Professional Building, 330 North Charles street.

Baltimore, Md.—Hospital.—Wyatt & Nolting, architects, Keyser Building, have been commissioned to prepare plans and specifications for tuberculosis hospital building to be erected at Eudowood, near Baltimore, to cost about \$25,000.

Baltimore, Md.—Store Buildings.—Charles B. Hakesley, 1212 North Gay street, has awarded contract to Wm. H. Porter & Son, 505 East Forrest street, for construction of two three-story brick store buildings with modern conveniences at 591-593 North Gay street to cost \$6000.

Baltimore, Md.—Hospital.—Sisters of Mercy, City Hospital, Calvert and Saratoga streets, have commissioned Baldwin & Pennington, architects, Professional Building, 330 North Charles street, to prepare plans and specifications for addition to hospital building to be erected on Courtland near Saratoga street and joined to other buildings; five stories; 54x110 feet; modern conveniences. Construction work will not start until spring.

Baltimore, Md.—Barn.—St. Agnes Sanitarium, Caton avenue, near Wilkens avenue, will erect in spring new barn; two and three stories; 125 feet frontage, with wing 88 feet long; brick, wood or concrete construction; slate roof; Baldwin & Pennington, architects, Professional Building, 330 North Charles street.

Baltimore, Md.—Club Building.—Baltimore Club, 916 North Charles street, awarded contract to John Cowan, builder, 106 West Madison street, for general alterations and construction of two additions to club building at northwest corner Charles and Madison streets. Plans provide for complete remodeling of interior; installation of new electrical, heating and plumbing systems, pneumatic tubes, two electric elevators, refrigerating plant, electric dumbwaiters; additions will be one-story billiard room, 29x60 feet, and two-story restaurant, 28x60 feet. Elliott & Emmart, architects, Union Trust Building.

Bessemer, Ala.—Federal Building.—Reported that plans are nearly completed and that bids will be let about February 1 for erection of Federal building in Bessemer to cost approximately \$65,000; James Knox Taylor, Treasury Department, Washington, D. C., supervising architect.

Birmingham, Ala.—Business Building.—R. E. Whitlow is having plans prepared by J. W. McClain for erection of business building; one story; brick and stone.

Blytheville, Ark.—Building.—W. E. Talley, Jonesboro, Ark., will erect building at estimated cost of \$20,000; plans not made; architect not engaged. Building will probably be of mill construction and have electric lighting.

Boca Grande, Fla.—Government Building.—Sealed proposals will be received at office of Supervising Architect, Treasury Department, Washington, D. C., until January 10 for construction of quarters and boathouse at Boca Grande Quarantine Station. Copies of drawing and specifications may be obtained at discretion of supervising architect on application at architect's office or from medical officer in command at Boca Grande Quarantine Station, Punta Gorda, Fla.

Chattanooga, Tenn.—Store Building.—I. H. Oppenheim Company, 1013 Chestnut street, will erect three-story brick store building.

Chattanooga, Tenn.—Garage.—Chattanooga Automobile Co. awarded contract to Joseph Trimby for remodeling garage; sheet-iron building 100x150 feet; steam heat; electric lighting. (See item under "Foundry and Machine Plants.")

Durham, N. C.—Hospital.—Kendall, Taylor & Co., 93 Federal street, Boston, Mass., are preparing plans for hospital buildings previously mentioned; plans will include one three-story and one two-story fireproof buildings, boiler-house and service building; steam heat; lighting undecided; elevators, character not determined; laundry machinery may be installed; address architects.

Ferriday, La.—Business Building.—D. D'Antoni, Natchez, Miss., is reported to erect fireproof business building at Ferriday.

Franklinton, La.—Jail.—Police Jury will erect jail costing about \$10,500 according to plans by F. B. Hull Construction Co., Alexandria, La.

Monongah, W. Va.—Asylum.—Fairmont Coal Co., C. W. Watson, president, Fairmont, W. Va., will erect orphan's home at Monongah, to cost about \$50,000; main office in Continental Trust Building, Baltimore, Md.

Morganton, N. C.—Hospital.—State Hospital will erect special wards for tuberculosis

patients, for which \$5000 has been appropriated by the Legislature. Dr. John McCampbell, superintendent, has suggested the erection of nurses' home, utilization of old laundry building for industrial purposes, etc., to cost about \$18,000, and erection of colony building for 100 men, cost estimated at \$30,000.

Natchez, Miss.—Store Building.—Beer, Myers & Co. will rebuild structure recently reported burned; architect not engaged; as proposed, building will be three to five stories, brick, fireproof, with steam heat and electric lighting; freight and passenger elevators; estimated cost, \$50,000.

Norfolk, Va.—Engine-house.—Annex Hose Co. will erect brick engine-house at a cost of about \$3500. W. Scott Parker, Captain.

San Antonio, Texas.—Convent.—Sisters of Divine Providence will erect community house; modified Gothic style of architecture; cost, \$70,000.

Sedalia, Mo.—Jail.—Pettis county is considering erection of stone jail; C. W. McAmloch, Presiding Judge; M. L. Imhoff, County Clerk.

Seymour, Texas.—Jail.—Baylor county jail, recently noted to be erected, will be fireproof building; steel and stone; 33x37 feet; cost \$8000; bids to be opened December 20; plans by Southern Steel Structural Co., San Antonio, Texas; R. F. Bowman, County Judge.

Shellhorn, Ala.—Business Building.—John R. Caldwell & Son have had plans prepared by William Henderson for erection of buildings to cost \$7500.

St. Louis, Mo.—Stable.—Herman C. G. Layties awarded contract to A. A. Fischer Architectural & Building Co., 728 Chestnut street, for erection of stable recently mentioned; plans by same company; two stories; stone; steam heat; electric lighting; cost \$8000.

Tampa, Fla.—Express Stables.—Southern Express Co., J. B. Hockaday, superintendent, Savannah, Ga., will erect stables and express depot in Tampa to cost \$20,000. Contract has been awarded to a Savannah company.

Tybee, P. O. Savannah, Ga.—Summer Resort.—Stubbs & Keen, recently noted incorporated, will make proposed improvements to summer resort; will erect buildings of ordinary construction; electric lighting to be used; four-ton ice plant will be installed. (See "Machinery Wanted.")

Ward, S. C.—Store Building.—O. S. Strom will rebuild store building recently burned; plans not made; as proposed, new structure will be 50x80 feet; fireproof; gas heating and lighting; cost, \$5000.

### MUNICIPAL BUILDINGS

Alexandria, La.—City Hall.—Hull Construction Co., Jackson, Miss., has contract to erect proposed city hall and administration building; 80x80 feet; two stories, with basement; roof plan to include dome centrally located; plumbing; low-pressure steam heat; electric fixtures; cost about \$65,000; E. J. Hull, architect. (Previously mentioned.)

Baltimore, Md.—Fire Engine House.—As result of competition Simonson & Pietsch, architects, American Building, have been selected to prepare plans and specifications for proposed fire-engine house to be erected at 323-325 North Paca street; two stories; brick, with granite base and ornamental terra-cotta trimmings; concrete floor; enameled brick or tile interior; metal ceiling; iron circular stairway; brass sliding poles; metal lockers; electric wiring and fixtures; sanitary plumbing; steam-heating system; cost, \$25,000. Bids on construction will be asked by advertisement when plans are completed.

Chattanooga, Tenn.—Fire Hall.—City will erect fire hall recently mentioned; contractors for building proper, Brandon & Davis; plans by Bearden & Foreman, Chamberlain Building; first floor fireproof; three stories; 56x60 feet; hot-water heating; combination lighting; cost, \$28,000.

Chattanooga, Tenn.—City Hall.—Joseph Trimby is lowest bidder, at \$157,750, for erection of City Hall; three stories and basement; fireproof; steam heat; electricity and gas; plumbing; exterior of building, including all cornices and ornamental work, faced with stone, backed up with brick, terra-cotta partition blocks or reinforced concrete; steel framing for floors, ceiling and roof; roof covered with tile or slate and metal; interior marble work. (Recently mentioned.)

Roanoke, Va.—Market-house.—City has awarded contract to W. F. Baker at \$36,950 for improving and enlarging the City Market according to plans by H. H. Huggins. (Previously mentioned.)



## RAILWAY STATIONS

Kansas City, Mo.—Kansas City Southern Railway has had plans prepared by A. F. Rust, resident engineer, Thayer Building, for erection of freighthouse and depot; 35x500 feet; brick and stone; cost about \$35,000.

## SCHOOLS

Abingdon, Va.—Goodson District School Board awarded contract to Ballard & Kingsolver, Bristol, Va., for erection of frame school building after plans by F. Folanabee, Glade Springs, Va.

Birmingham, Ala.—Jefferson County Board of Education will expend about \$50,000 in erection of school building.

Del Rio, Texas.—Del Rio Independent School District has issued \$30,000 of bonds for erection of school building. Address The Mayor. (Recently mentioned.)

Fort Smith, Ark.—School Board will expend from \$50,000 to \$60,000 in erection of school building recently noted; plans by A. Klingensmith; fireproof building; 16 rooms; steam-heat heating system; bids to be opened January 11; John W. Morton, secretary of Board. (See "Machinery Wanted.")

Hallettsville, Texas.—City will issue \$18,000 of bonds for erection of school building; two stories and basement; eight rooms; brick. Address The Mayor.

Hoxie, Ark.—Moore & Ridgeway have contract at about \$18,000 for erection of school building after plans by George R. Mann, Little Rock, Ark. (Recently mentioned.)

New Orleans, La.—Tulane University will open bids December 26 for erection of Richardson Memorial Building recently mentioned and described; plans by Andy & Bender-nagel, 211 Camp street; four stories and basement; stone exterior; specifications for elevators and lighting and heating plants not yet prepared; cost of building \$150,000.

New Orleans, La.—John Chisolm & Co. are lowest bidders at \$27,000 for erection of two-story-and-basement frame school building; E. T. Hardee, City Engineer, has recommended acceptance.

West Point, Miss.—J. E. Caruthers will erect school building.

Williamstown, W. Va.—City will complete school building for which \$25,000 of bonds were recently reported voted; architects, Alexander & Chapman, Martinsville, W. Va.; contractor, C. W. Dowling; three-story brick building; 51x124 feet; ordinary construction; hot-air heating; gas and electric lighting; cost, \$40,000.

## THEATERS

Columbus, Ga.—Dixie Electric Theater Co., with authorized capital stock of \$10,000, incorporated by Z. A. Brooks, R. I. Zacharias and E. J. Brooks to conduct electric theater.

Guymon, Okla.—Guymon Opera House Co. incorporated with \$10,000 capital stock by L. E. Latham, John H. Lott, E. C. Summers and others.

St. Louis, Mo.—Bourland Investment Co., 617 Chestnut street, has plans for erection of theater; two stories; 43x53 feet; seating capacity about 1000; steam heat; gas and electric lighting.

## WAREHOUSES

Chattanooga, Tenn.—Fritts Hardware Co. will erect warehouse.

Memphis, Texas.—Hall County Farmers' Union Warehouse Co. incorporated with \$3000 capital stock by O. B. Burnett, W. P. Cagle, J. L. Bain and others.

Memphis, Tenn.—John Wade & Sons, 50 North Front street, will soon begin erection of warehouse. Fred Friedline & Co., Chicago, Ill., architect and builder. (See item under "Miscellaneous Enterprises.")

Norfolk, Va.—Virginia Wharf & Warehouse Co. incorporated with \$15,000 capital stock; A. P. Jones, president, and W. H. Jones, vice-president.

Noxapater, Miss.—Farmers' Union Warehouse Co. incorporated with \$3000 capital stock by William McBrayer, Lines, Miss.; A. C. Palmer, Kellis Store, Miss.; A. J. Palmer and J. T. Holman, both of Louisville, Miss.

Sheridan, Ark.—Farmers' Union Warehouse Co. incorporated to erect cotton warehouse; J. W. Lybrand, president; W. J. Holloman, vice-president, and J. T. Martin, treasurer.

Valley Mills, Texas.—Farmers' Union Warehouse Co. incorporated with \$3000 capital stock by E. O. Mulhouse, E. G. Hill, W. W. Vickery and others.

Washington, D. C.—Thomas W. Smith, 1st street and Indiana avenue N. W., has awarded contract to James L. Parsons, Pennsylv-

vania avenue and 13½ street N. W., for construction of three-story brick warehouse on 1st street between N and O streets S. W.

## RAILROAD CONSTRUCTION

## RAILWAY STATIONS

Annapolis, Md.—The Washington, Baltimore & Annapolis Electric Railway Co. has completed its tracklaying in the city of Annapolis. Work on the line between Baltimore and Washington is being pushed.

Asheville, N. C.—Reported that contract has been let to the Carolina Construction Co. to build the proposed Asheville & Hendersonville Electric Railway. Among those interested are J. R. Tucker and J. D. Murphy.

Atlanta, Ga.—The Atlanta, Birmingham & Atlantic Railway Co. is now doing work on its Atlanta branch within the city limits, and it is expected to soon complete it to the terminal. The branch is 78 miles long from Manchester, Ga., on the main line northward to Atlanta, and its early operation is anticipated.

Beaumont, Texas.—The Kansas City Southern Railroad, it is reported, has let a contract to Walter Myrick of Beaumont to furnish shell ballast for its line from Beaumont, Texas, to DeQuincy, La. Heavy rail is also to be laid.

Beaver City, Okla.—The Beaver Valley & Northwestern Railway Co. is reported to have reorganized by electing J. W. Webb president, J. F. Laughlin treasurer and W. A. Liporant and A. D. Green trustees. The proposed line is from Beaver City in a northwesterly direction.

Bluffton, Ga.—A meeting has been held to organize a railroad for building a line from Bluffton to Arlington, Ga., and charter will be asked. A committee has been appointed as follows: J. E. Peterson, J. E. Paulin, A. W. Holly of Fort Gaines, Ga.; Hon. W. B. Hattaway, W. T. Hancock and J. E. Mansfield of Bluffton, Ga.

Carthage, N. C.—The Randolph & Cumberland Railway is reported to have completed about three miles of grade on the extension from Hallison to Deep River, N. C., four miles, and track laying is to begin about February 1.

Center, Texas.—Official: The Gulf, Colorado & Santa Fe Railway has let a contract for an extension of 21 miles between Center and Zuber to connect with the Texas & Gulf Railway, John Scott & Son of St. Louis being the contractors. Construction has begun on this line, which will run via Teneha, on the Houston East & West Texas Railway. No arrangement has yet been made for the extension from Longview north.

Chattanooga, Tenn.—An officer of the Louisville & Nashville Railroad Co. writes the Manufacturers' Record denying the report that it would build an extension from Etowah, Tenn., to Chattanooga.

Cleveland, Tenn.—J. W. Adams of Chattanooga, Tenn., who was granted a franchise for an electric railway in Bradley county, is quoted as saying that nothing will be done at present.

Columbus, Miss.—The Aberdeen & Tombigbee Valley Railroad Co. has filed a mortgage for \$750,000 to secure that amount of 30-year 5 per cent. bonds. The proceeds are to be used for construction. H. E. Reynolds is president at Columbus.

Dallas, Texas.—The Dallas Interurban Electric Railway Co. will, it is reported, resume construction about March 1 on its electric railway to connect Dallas, Terrell and Tyler, Texas. Survey made for 84 miles by the American Engineering Co. of Indianapolis. D. E. Waggoner is president, I. J. Willingham vice-president and general manager, J. Mercer Carter superintendent, S. A. Slemmons secretary, H. M. Wolfe treasurer, all at Dallas; office, 219 Commerce street.

Eureka Springs, Ark.—An official letter to the Manufacturers' Record says that the Allegheny Improvement Co., which has charge of construction of the extensions of the Missouri & North Arkansas Railroad, has just let contracts for work from Kensett to Cotton Plant, Ark., 29½ miles, which work is to be completed by October 1 next.

Fairmont, W. Va.—Official: The Fairmont & Mannington Railroad Co. is nearly completed grading from Mannington to Fairmont, W. Va., 14 miles, and has laid 3½ miles of track. Ties and rails are being distributed. Ballasting not yet begun.

Frederick, Md.—Theodore J. King of Washington, D. C., has begun preliminary survey for the proposed electric railway from Frederick via Buckeystown and Poolesville, Md., to Great Falls, 33 miles, connection to be made at the latter point with the Great Falls & Old Dominion Railway, of which he is con-

sulting engineer. This would make a line of 47 miles from Washington to Frederick.

Fredericksburg, Va.—The Fredericksburg & Southern Railway Co. has applied for a charter to build an electric railway from Fredericksburg to Ashland, Va., the latter being a terminus of the Richmond & Chesapeake Bay Electric Railway. The proposed line will run through Spottsylvania, Caroline and Hanover counties. It includes a street railway in Fredericksburg. The directors are W. C. Whitner, president; E. J. Smith, vice-president; Alvin T. Embrey, secretary and treasurer; C. W. Jones, A. P. Rowe, James T. Lowery and A. W. Embrey. Mr. Whitner is a civil engineer, it is said, at Rock Hill, S. C., while the others reside at Fredericksburg, Va. A later report says the terminus will be at Doswell, Va., six miles from Ashland, and the line is to be 40 miles long. H. W. Anderson of Richmond, counsel, is quoted as saying that the Richmond & Chesapeake Bay Electric Railway Co. is interested.

Galveston, Texas.—The Galveston Wharf Co. gives notice that it will apply for a franchise to lay track on Avenues A and B and also on 33d, 34th and 35th streets. The Gulf, Colorado & Santa Fe Railway also gives a similar notice. These plans are to carry out the improvements of the Galveston Terminal Co.

Guthrie, Okla.—The River & Rail Transportation Co. has been incorporated with \$50,000,000 capital by G. V. Pattison, L. E., L. R. and H. W. Pentecost, all of Guthrie; H. William Kirchman, Robert W. Rutledge, Charles A. Gutke and others, all of St. Louis.

Hereford, Texas.—The Panhandle Short Line Railroad Co., which has completed grade from Hereford to Dimmitt, Texas, 20 miles, will, it is reported, lay track thereon next month. The entire line from Hereford to Stanton, Texas, 200 miles, will, it is said, now be completed. J. H. Ransom is president and Hans Helland is chief engineer. W. A. Squires, president of the North Texas & Oklahoma Promoting Co., is also said to be interested.

Laurel, Miss.—Reported that Eastman, Gardner & Co. of Laurel are preparing to build a railroad from Mize, in Smith county, on the Gulf & Ship Island Railroad, to Morton, in Scott county, on the Alabama & Vicksburg Railroad, about 41 miles.

Madisonville, Ky.—George M. Feagin, chief engineer of the Madisonville, Hartford & Eastern Railway, Hartford, Ky., is reported as saying that 85 per cent. of grade is completed between Madisonville and Mitchell, Ky., 55½ miles, and track laying will begin early next year.

Marion, S. C.—The Marion & Southern Railroad is reported to be partly graded from Marion to Bennettsville, S. C., 49 miles, and work will be pushed in 1908. G. F. Johnson is chief engineer, at West Marion, S. C. The Marion County Lumber Co. of Franklin, Va., is back of the line.

Meridian, Miss.—The New Orleans & North-eastern Railway will, it is reported, build a cutoff a mile and a half long from Twenty-seventh avenue to connect with another point on the main line at Meridian, this to be used only by passenger trains. J. C. Haugh is resident engineer at New Orleans, La.

Milby, Ala.—F. S. Parrigin, chief engineer of the Tombigbee Valley Railway, is reported as saying that construction has ceased on the extension from Silas to Butler, Ala., 28 miles, and will not be resumed until money conditions improve.

Mount Sterling, Ky.—An officer of the Louisville & Nashville Railroad writes the Manufacturers' Record denying the report that the company contemplated building a railroad from Paris or Carlisle, Ky., to Mount Sterling, Ky.

Muskogee, Okla.—The Missouri, Kansas & Texas Railway is reported to be surveying to enlarge the yards at Muskogee, and the company will also continue its double-tracking from Atoka to Muskogee, thus completing double track between Muskogee, Okla., and Denison, Texas. S. B. Fisher is chief engineer at St. Louis, Mo.

Nashville, Tenn.—President H. H. Mayberry of the Nashville & Columbia Interurban Electric Railway is reported as saying that about 11 miles are graded and only little more than five miles to grade on the line from Nashville to Franklin, Tenn., 17 miles. Line is to be operated by July 1 next.

Nashville, Ark.—President H. L. Rammel of the Memphis, Paris & Gulf Railroad, Little Rock, Ark., writes the Manufacturers' Record that this line, now completed from Nashville to Ashdown, Ark., 28 miles, will be extended next summer about 10 miles northward, and also southward to Richmond, Ark., about eight miles. The line is projected to reach Paris, Texas, and also Memphis, Tenn., via Hot Springs, Ark. It is being

built by a construction company, which is doing its own work.

New Orleans, La.—Charles D. Haines of New York, who purchased the New Orleans, Fort Jackson & Grand Isle Railroad, is reported as saying that it is proposed to build a branch from Myrtle Grove plantation to St. Denis, 13 miles, also an extension from Buras to Fort Jackson, 12 miles, and probably to the Gulf, 40 miles further.

Oakdale, La.—The Gulf, Colorado & Santa Fe Railway, it is reported, will complete the Jasper & Eastern Railway into Oakdale, La., in a few days and it will immediately be put into operation.

Owensboro, Ky.—The Manufacturers' Record is informed that the Osborne Engineering Co. of Cleveland, Ohio, has nearly completed plans and specifications for the Owensboro & Rockport Bridge & Terminal Co.'s line, which includes a railroad and also a bridge over the Ohio river between Owensboro, Ky., and Rockport, Ind. Most of the right of way has been secured. While no contracts are let, it is expected that work will begin next spring. E. T. Franks of Owensboro, Prof. F. H. Kennedy of Rockport and others are interested.

Paducah, Ky.—N. M. Burns of St. Louis, president of the proposed Toledo, St. Louis & New Orleans Railroad, will, it is reported, again advocate the building of his line via Paducah, Ky. Thomas W. Hall of Carmi, Ill., is secretary of the company.

Rockland, Texas.—The Burr's Ferry, Brownel & Chester Railroad is reported to have completed grading and bridging on the extension from Aldredge to Brownel, Texas, 2½ miles, and it is expected to make a further extension from Brownel to Burkeville, Texas, 28 miles, next spring. Track laying is to begin soon. F. G. Omohundro is chief engineer at Beaumont, Texas.

Sallisaw, Okla.—Samuel H. Randall is reported to be investigating before closing a contract to build the proposed St. Louis, Springfield & Western Railway, chartered some time ago by A. D. Goodenough of Sulphur, Okla.; line to go from Sallisaw via McAlester and Sulphur to Lawton, Okla.

Selma, Ala.—The Louisville & Nashville Railroad, it is reported, is enlarging and improving its yard in the northeastern part of Selma.

Sistersville, W. Va.—Preliminary survey is reported under way by E. L. Benton, civil engineer, for the proposed railway between Sistersville and Middlebourne. William J. Cousins, J. B. Walker and E. K. B. Martin of Pittsburg are said to be interested.

Stamford, Texas.—The Stamford & Northwestern Railway is reported to have completed survey from Stamford northwest for 150 miles to a point near the center of Dickens county. Construction is to begin within two months. L. M. Bule is president, at Stamford.

Sumter, S. C.—The Betts Lumber Co.'s railroad, which starts from a point on the Atlantic Coast Line three miles east of Sumter and runs 12 miles to a point near Black river, is reported to be pushing work on an extension of the line in the vicinity of that stream. Line will run to Black River road and Shiloh. W. Loring Lee of Sumter is engineer.

Swansboro, N. C.—The Swansboro Land & Lumber Co. informs the Manufacturers' Record that it has built eight miles of railroad from Swansboro, which is to be continued to connect with the Atlantic Coast Line (Wilmington-Newbern branch) near Deppe, 15 miles from Swansboro. It is to be a commercial road in addition to handling the company's lumber.

Tracy City, Tenn.—Toney & Lawler of Chattanooga are reported to have nearly completed grade for an extension of the Nashville, Chattanooga & St. Louis Railway from Tracy City about four and one-half miles to lands of the Nunley Ridge Coal Co. at Pryor Ridge. It is expected to begin tracklaying about January 1.

Tyler, Texas.—The People's Railway Co., which proposes to build a line from Dallas, Texas, to Leesville, La., is reported to have completed survey from Tyler to Canton, 28 miles. B. B. Cain is president and J. M. Howe, chief engineer at Tyler.

Waco, Texas.—Stephen Turner, chief engineer, is reported to have completed plans for the proposed Waco, Hamilton & Brownwood Railroad from Waco to Brownwood, Texas, 131½ miles; maximum grade, 1 per cent.

West Point, Ga.—The Chattahoochee Valley Railway has filed with the Secretary of State its plans to build an extension from West Point northward through Troup county, Georgia, to a point at or near Standing Rock in Chambers county, Alabama; thence

through Randolph county, Alabama, to a point at or near Glenn in Heard county, Georgia, and to a point at or near Texas in the same county. L. Lanier is president at West Point, Ga.

### STREET RAILWAYS

Ardmore, Okla.—J. R. Yarbrough has, it is reported, arrived at Ardmore to superintend construction for the proposed street railway, and construction will begin as soon as material is received.

Minden, La.—Mr. H. A. Davis, secretary of the Minden Progressive League, who, with J. B. Story, applied for a street-railway franchise for the Minden Traction Co., writes the Manufacturers' Record that the company will be chartered when the city grants a franchise, which is expected in the near future. It is proposed to build a motor-car line about four miles long.

### MACHINERY, PROPOSALS AND SUPPLIES WANTED

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The Manufacturers' Record has received during the week the following particulars as to machinery that is wanted.

Altars.—Rev. L. Laroche, pastor Catholic Church, Eunice, La., wants altars for new church.

American Manufacturers.—Achilles Bacon & Co., Salonica, Turkey, are prepared to correspond with manufacturers of all kinds of American products relative to representation.

Automatic Gates.—See "Railway Supplies."

Automobiles.—See "Motor Cars."

Beltling.—Kosciusko Oil Mill & Fertilizer Co., Kosciusko, Miss., wants beltling.

Blowers.—Worswick-Haardt Harvester Co., Montgomery, Ala., wants suction blowers.

Boiler.—Southern Extract Co., Knoxville, Tenn., wants 150-horse-power return-tubular boiler with four-inch tubes; must stand Hartford inspection for 125 pounds.

Boiler.—Advance Equipment Co., West End Trust Building, Philadelphia, Pa., wants boiler. (See "Crushing Plant.")

Boiler.—Henderson Chair Co., Henderson, Ky., wants 100-horse-power boiler.

Boiler.—Newton Steam Laundry, Newton, N. C., in market for first-class second-hand return tubular boiler of 15 to 20 horse-power.

Boilers.—Collins Bros., Houston, Texas, want prices on boilers and feed-water heaters.

Boxes.—J. F. Bailey, 707 Dartmouth street, Brunswick, Ga., wants to correspond with manufacturers of and dealers in razor boxes.

Brick.—King Lumber Co., Charlottesville, Va., wants prices on common and pressed brick, delivered at Selma, Ala.

Bridge.—Bids will be received until January 2 at office of T. C. Merwin, County Clerk of St. Francis county, Forrest City, Ark., for construction of 700-foot steel draw highway bridge over the St. Francis river at Madison, Ark., to cost between \$30,000 and \$35,000; certified check, \$1000; usual rights reserved; plans and specifications on file at above office or of H. N. Pharr, consulting engineer, 216 Randolph Building, Memphis, Tenn.; F. W. DeRosier, E. A. Rolfe and James Fussell, Commissioners of St. Francis county.

Bridge.—Board of County Commissioners, S. T. Sistrunk, Clerk, Ocala, Fla., will open bids January 8 for construction of steel bridges across Blue river, near Dunnellon, Fla., and across Withlacoochee river at Stokes Ferry. Copies of plans and specifications on file at office of Austin Bros., architects, Atlanta, Ga., or of S. T. Sistrunk, at Ocala; usual rights reserved.

Bridges.—D. G. Zeigler, National Loan and Exchange Bank Building, Columbia, S. C., wants estimates on steel bridges.

Canal Construction.—Board of Drainage Commissioners, G. W. Holmes, president, Greenwood, Miss., will open bids December 31 for construction of main drains of Ellisberry Drainage District and Jones-Walton Drainage District, both in LeFlore county, Mississippi. Former work consists in clear-

ing right of way and digging about 11 miles of ditches, requiring the removal of about 178,000 cubic yards of dirt; latter work to be done in clearing right of way and digging about six miles of ditches, requiring the removal of about 66,000 cubic yards of dirt. Both contracts to be completed in two years or less as agreed upon. Plans, specifications, profiles, etc., on file in Chancery Clerk's office. Bond in amount of contract required.

Cement.—King Lumber Co., Charlottesville, Va., wants prices of Portland cement.

Chair Machinery.—Henderson Chair Co., Henderson, Ky., wants bending machine for bending slats, posts and arms.

Check Protectors.—Frank Hatcher, 621 Vine street, Philadelphia, Pa., wants to correspond with manufacturers of check protectors.

Collars.—Natchez Pneumatic Collar & Harness Co., Natchez, Miss., wants skeleton collars.

Cotton Machinery.—Laurel Bluff Cotton Mills, J. L. Brown, proprietor, Mount Airy, N. C., wants to correspond relative to purchase of 2000 modern spindles and accompanying apparatus for manufacturing 14s to 24s yarns.

Cotton-Mill Machinery.—D. G. Zeigler, National Loan and Exchange Bank Building, Columbia, S. C., wants prices on cotton-mill machinery.

Crushers.—Hugh E. White, Rock Hill, S. C., wants information and prices on rock-crushing outfits.

Crushing Machinery.—Empire Lime & Stone Co., Moundsville, W. Va., wants crushing machinery.

Crushing Plant.—Advance Equipment Co., West End Trust Building, Philadelphia, Pa., is in market for complete mounted crushing plant, consisting of crusher, engine, boiler, elevators and screens, with capacity of about 75 tons per day.

Dredge.—L. F. Hobbs, 222 Atlantic Trust Building, Norfolk, Va., is in market for floating drifter dredge with three-yard bucket.

Dredging.—Bids will be opened January 11 for dredging in Rappahannock river, Virginia, at U. S. Engineer's Office, 23d and K streets N. W., Washington, D. C.; information on application. Spencer Cosby, Major, Engineers.

Electric Generators.—D. G. Zeigler, National Loan and Exchange Bank Building, Columbia, S. C., wants prices on electric generators.

Electric Lighting.—Stubbs & Keen, Savannah, Ga., want prices on electric-lighting plant.

Electric Equipment.—King Lumber Co., Charlottesville, Va., wants estimates on electric construction in new postoffice and courthouse building, Selma, Ala.

Electric Generators and Supplies.—Collins Bros., Houston, Texas, want prices on electric generators and supplies.

Electrical Equipment.—Charlotte Motor Car Co., Charlotte, N. C., wants equipment for recharging storage battery.

Electrical Equipment.—Natchez Pneumatic Collar & Harness Co., Natchez, Miss., wants electrical equipment.

Elevators and Screens.—Advance Equipment Co., West End Trust Building, Philadelphia, Pa., wants elevators and screens. (See "Crushing Plant.")

Engine.—Advance Equipment Co., West End Trust Building, Philadelphia, Pa., wants engine. (See "Crushing Plant.")

Engine.—Joseph H. Aynesworth, City Secretary, Childress, Texas, wants prices on engine.

Engine.—Henderson Chair Co., Henderson, Ky., wants 70-horse-power engine.

Engines.—Collins Bros., Houston, Texas, want prices on engines.

Feed-water Heaters.—Collins Bros., Houston, Texas, want prices on feed-water heaters.

Furniture Machinery.—See "Chair Machinery."

Gasoline Engines.—Worswick-Haardt Harvester Co., Montgomery, Ala., wants prices on gasoline engines.

Granite.—King Lumber Co., Charlottesville, Va., wants prices on granite delivered at Selma, Ala.

Heating.—John W. Morton, secretary, School District, Fort Smith, Ark., will want bids on heating plant for school building; \$50,000 to \$60,000.

Heating.—King Lumber Co., Charlottesville, Va., wants estimates on heating plant (steam) for new postoffice and courthouse, Selma, Ala.

Ice Plant.—Stubbs & Keen, Savannah, Ga., want prices on four-ton ice plant.

Iron Guards and Gates.—Time for opening bids for iron window guards and gates for U. S. Custom-house, Baltimore, Md., has been extended from December 18, as recently mentioned, until January 3; James Knox Taylor, Supervising Architect, Treasury Department, Washington, D. C.

Iron Saw.—D. L. Casey Machine Co., Springfield, Ohio, wants iron cut-off saw for machine shop.

Locomotives.—D. G. Zeigler, National Loan and Exchange Bank Building, Columbia, S. C., wants prices on dummy engines for construction purposes.

Machine Tools.—Charlotte Motor Car Co., Charlotte, N. C., wants equipment of machine tools for automobile repair shop.

Miscellaneous Supplies.—Bids will be received until January 6 at office of H. F. Hodges, general purchasing officer Isthmian Canal Commission, Washington, D. C., for furniture, beds, mattresses, ranges, engine and generator, switchboard, boring and turning mill, journal boxes, refrigerators, etc. General information relating to Circular No. 408 obtained from above office or office of assistant purchasing agent, 24 State street, New York; Custom-house, New Orleans; 1066 North Point street, San Francisco, Cal., and 413 Chamber of Commerce Building, Tacoma, Wash.; also from Chief Quartermaster, Chicago; Depot Quartermaster, St. Louis; Depot Quartermaster, Jeffersonville, Ind., and Chief Quartermaster, Atlanta, Ga., and at U. S. Engineer Office in following cities: Baltimore, Philadelphia, Pittsburgh, Boston, Buffalo, Cleveland, Cincinnati, St. Paul, Detroit, Milwaukee, Chicago, St. Louis, Chattanooga, Louisville and Mobile.

Mixing Apparatus.—Davis Electric Co., Parkersburg, W. Va., wants to correspond with manufacturers of mixing apparatus; wants special machine for mixing pulverized graphite and asbestos cement to consistency of dough; capacity of machine one-half to one barrel.

Motor Cars.—Minden Traction Co., Minden, La., wants complete information regarding gasoline motor cars suitable for street-railway purposes. Address care of H. A. Davis.

Numbering Machines.—Frank Hatcher, 621 Vine street, Philadelphia, Pa., wants to correspond with manufacturers of numbering machines.

Oil-mill Machinery.—Kosciusko Oil Mill & Fertilizer Co., Kosciusko, Miss., is in market for machinery for pressroom and lint-room, transmission machinery and beltling.

Ornamental Iron.—King Lumber Co., Charlottesville, Va., wants prices on ornamental iron delivered at Selma, Ala.

Paving.—Baltimore (Md.) Board of Awards, City Hall, will receive bids until December 27 to grade, curb, gutter and pave with bitulithic, sheet asphalt, asphalt blocks or vitrified brick Konig street between Linden and Bolton avenues. Specifications and proposal sheets can be obtained from Commissioner for Opening Streets.

Piping.—Second-Hand Pipe & Supply Co., Parkersburg, W. Va., in market for second-hand piping and casing, as follows: 10,000 feet 1-inch pipe, 15,000 feet 2-inch pipe, 5000 feet 3-inch pipe, 2000 feet 4½-inch 10-pound 14-thread casing, 5000 feet 4½-inch 13-pound 11½-thread casing, 3000 feet 5 3-16-inch 13-pound 11½-thread casing, 4000 feet 6½-inch 11½-thread casing, 1000 feet 6½-inch 17-pound 11½-thread casing, 10,000 feet 6½-inch 17-pound 10-thread casing, 2000 feet 8½-inch 20-pound 11½-thread casing, 3000 feet 8½-inch 24-pound 8-thread casing, 1000 feet 10-inch 22-pound 8-thread casing; will purchase regardless of good collars and threads, provided body of pipe is good.

Piping.—Bids will be received at office of W. P. Knowles, superintendent City Gas Works, Richmond, Va., until December 30 for furnishing pipe and all labor and material required for construction of 6, 10, 12 and 20-inch gas mains to be laid in certain streets. Bidders may also estimate separately in furnishing pipe, specials and valves f. o. b. Richmond, or laying same, or for digging and refilling trenches, as per specifications; usual rights reserved; certified check, \$500. Plans and specifications on file at above office.

Piping and Plugs.—Joseph H. Aynesworth, City Secretary, Childress, Texas, wants prices on 6-inch mains, and plugs.

Plumbing.—Board of Public Improvements, Room 300 New City Hall, St. Louis, Mo., will open bids December 31 for Letting No. 8943—furnishing all materials, tools and labor necessary for installation of certain plumbing at City Insane Asylum on Arsenal street; deposit \$250. Blank proposal forms, specifications, etc., can be seen or obtained at office of Andrew J. O'Reilly, president Board of Public Improvements; usual rights reserved;

certified check on some bank or trust company in St. Louis, payable to order of City Treasurer, for amount of deposit above named; W. B. Dryden, secretary.

Plumbing.—John W. Morton, secretary, School District, Fort Smith, Ark., will want bids on plumbing contract for \$50,000 to \$60,000 school building.

Plumbing.—King Lumber Co., Charlottesville, Va., wants estimates on plumbing for new postoffice and courthouse, Selma, Ala.

Power Plants.—Collins Bros., Houston, Texas, want prices on engines, generators, feed-water heaters, boilers, pumps, electric supplies and steam specialties for large power plant.

Pumps.—Collins Bros., Houston, Texas, want prices on pumps.

Quarrying Machinery.—Empire Lime & Stone Co., Moundsville, W. Va., wants quarrying machinery.

Rails.—J. L. Guy & Co., Camden, S. C., want to lease (three to five years) six to nine miles second-hand 20 to 30-pound rails.

Railway Construction Supplies.—D. G. Zeigler & Co., National Loan and Exchange Bank Building, Columbia, S. C., wants prices on steel rails, frogs and switches.

Railway Equipment.—D. G. Zeigler, National Loan and Exchange Bank Building, Columbia, S. C., wants prices on trolley cars.

Railway Equipment.—See "Motor Cars."

Railway Supplies.—A. A. Pantet, chairman Police Committee, Fort Smith, Ark., wants addresses of manufacturers of automatic gates for railroad crossings over city streets.

Razor Handles.—J. F. Bailey, 707 Dartmouth street, Brunswick, Ga., wants to correspond with manufacturers of and dealers in horn and celluloid razor handles.

Road Construction.—Bids will be received until January 10 at office of Constructing Quartermaster, U. S. Army, Fort Washington, Md., for resurfacing macadam roads. Information regarding plans and specifications may be obtained at above office. Bidders must deposit \$5 if furnished with plans and specifications.

Road Construction.—Tryon Township Highway Commission, B. L. Ballinger, secretary, Tryon, N. C., will award contract December 24 for grading 1½ miles of road, work requiring about 8000 cubic yards of earth and about 4000 cubic yards of rock excavation. Profile, cross-section and specifications may be seen at office of William E. Strong, in charge, at Tryon; usual rights reserved.

Rubber Stamps.—Frank Hatcher, 621 Vine street, Philadelphia, Pa., wants addresses of manufacturers of rubber-stamp specialties, self-inking pads, etc.

Rubber.—Natchez Pneumatic Collar & Harness Co., Natchez, Miss., wants rubber in pads.

Sawing Machines.—Wm. & J. P. Deans, Colerain, N. C., want to correspond with manufacturers of drag sawing machines.

Sawmill.—Sumter Telephone Manufacturing Co., Sumter, S. C., wants small hand sawmill; second-hand preferred if in good condition.

Saws.—See "Iron Saw."

Seating.—Rev. L. Laroche, Eunice, La., wants pews for \$10,000 church.

Self-inking Pads.—Frank Hatcher, 621 Vine street, Philadelphia, Pa., wants to correspond with manufacturers of self-inking pads.

Shoe-repairing Machinery.—White-Hull Shoe Co., Parkersburg, W. Va., will want machinery for repairing shoes.

Spindles.—See "Cotton Machinery."

Standpipe.—Joseph H. Aynesworth, City Secretary, Childress, Texas, wants prices on standpipe, 100,000 gallons capacity.

Steam Specialties.—Collins Bros., Houston, Texas, want prices on steam specialties.

Steel Construction.—D. G. Zeigler, National Loan and Exchange Bank Building, Columbia, S. C., wants estimates on steel construction for cotton factory.

Steel Reinforcement.—D. G. Zeigler, National Loan and Exchange Bank Building, Columbia, S. C., wants prices on steel reinforcement for construction of dam.

Steel Trolley Poles and Brackets.—D. G. Zeigler, National Loan and Exchange Bank Building, Columbia, S. C., wants prices on steel trolley poles and brackets.

Structural Steel.—King Lumber Co., Charlottesville, Va., wants prices on structural steel delivered at Selma, Ala.

Structural Steel.—Tulsa County Commissioners, Skiatook, Okla., will require structural steel for bridges and buildings during next two years.

Terra-cotta.—King Lumber Co., Charlottesville,



ville, Va., wants prices on ornamental terra-cotta delivered at Selma, Ala.

**Transmission Machinery.**—Kosciusko Oil Mill & Fertilizer Co., Kosciusko, Miss., wants transmission machinery.

**Water-wheels.**—D. G. Zeigler, National Loan and Exchange Bank Building, Columbia, S. C., wants prices on turbine water-wheels.

**Wheel Trucks and Wheels.**—Worwick-Haardt Harvester Co., Montgomery, Ala.,

wants special high-wheel trucks, steel wheels, etc.

**Wood Columns.**—Rev. L. Laroche, pastor Catholic Church, Eunice, La., wants wood columns for \$10,000 church.

**Woodworking Machinery.**—Bentham Machine Co., 803 Washington street, Suffolk, Va., wants machine to turn wooden axles.

**Woodworking Machinery.**—Harrisburg Hardwood Lumber & Handle Co., Harrisburg, Ark., wants planer and gang edger.

## INDUSTRIAL NEWS OF INTEREST

### Dixie Seal & Stamp Co.

The Dixie Seal & Stamp Co. of Atlanta, Ga., announces its removal to more extensive and better quarters at No. 70 North Broad street. This company furnishes all kinds of office supplies, rubber stamps and types, brass checks, notary seals, corporation seals, wax seals, numbering machines, stencils, etc.

### Ice and Water-Works Proposition.

The city of Atlanta, Texas, is desirous of granting franchise for the construction of water-works, and invites capitalists to investigate the opportunity. The population to be served is about 2500. It is also desired to have ice manufacturers establish a plant, and inducements are offered for such an enterprise. Particulars can be obtained by addressing the Mayor, Atlanta, Texas.

### The Francis Machinery Co.

The Francis Machinery Co. moved to its new location on December 10. It has acquired at 109 Market street, St. Louis, a four-story building, which will enable it to have office and factory under one roof and gives space for this growing enterprise. This company manufactures concrete molding machinery, including block and brick machines and molds for window sills, lintels and fenceposts, and its motto is "Keep the Quality Up." C. Eckhard is the manager.

### Has Space in Philadelphia Bourse.

Another prominent manufacturer has taken space for exhibition purposes in the Philadelphia Bourse. W. H. Rogers, superintendent of the Bourse exhibition department, makes the announcement. He states that the National Freezing Machine Co. of Philadelphia is the manufacturer mentioned, and will show a machine of 300 pounds capacity per day, operated by a half-horse-power electric motor. The company says the machine's cost of operation is equal to ice at 10 cents per 100 pounds, and it can be operated by electric, gas, gasoline or water motor.

### An Example for Young Men.

As an example to some of the young men of today who are more concerned in finding a "soft place" of employment than in a determined pursuit of any useful branch of industry, the C. B. Ford Company (the well-known founder and machinist of Richmond, Va.) refers to the case of one of its employees. This employee is a die cutter who has been for 55 years engaged in this line of work, and today is not only one of the most proficient workmen, but takes as much pride in the excellence of what he produces as the most ambitious man could desire. He is now 72 years of age, but his eye is keen and his hand steady. In his early days while following his trade as a machinist this workman of the old school is said to have manufactured the model of the first sewing machine made in this country.

### Do You Want Rebuilt Machinery?

It is not only for new machinery that there has been a great demand during the past several years, but second-hand and rebuilt machinery has also been called for in the necessities arising from the activity seen in all avenues of industrial progress. To buy, sell and rebuild used machinery has come to be an especial business in itself and one that is accorded full recognition by buyers throughout the country. One of the leading rebuilders of used machinery is the Indianapolis Machinery Exchange of Indianapolis, Ind. The company offers all kinds of mechanical equipments—wood and iron-working tools, boilers, engines, electric generators and motors, sawmills, foundry and machine-shop equipments, and numerous other necessities for manufacturing, mining and mill developments. Write the company for description and prices of present stock.

### Ball & Wood Air Compressors.

The Ball & Wood Company announces the addition to its well-known engines of a line of high-grade air compressors of new and advanced type, designed to meet modern requirements for air-compressing machinery, equal in material and workmanship to the

highest class of steam-engine construction. These compressors are the product of long experience in the design and manufacture of high-grade engines, combined with important new improvements in the air-compressing elements of the machine. They are liberally designed, with large bearings and wearing surfaces, rigid frames, effective lubrication, ample valve areas and intercooling capacities, securing compressors which operate with minimum noise and friction and at the highest economy. The company says that owing to the increased efficiency and capacity of these machines it is enabled to offer them at a price, based on actual capacity, which compares favorably with compressors of lesser worth now being used. The Ball & Wood Company's works and main office are at Elizabethport, N. J.; New York office at 17 Battery place, New York.

### Novel Use of Electric Flatirons.

It is not often that heating units from electric flatirons are put to as severe a test as in the following instance. The problem was to replace a crankpin on the high-pressure side of a 500-horse-power cross-compound Russell engine. The new pin was six inches in diameter, with a tape of one-sixty-fourth of an inch, and had to be fitted tightly into the disk, which was five inches thick, with a 12-inch shaft. To expand the disk by heating it with blow torches would have taken too long, besides making a dirty and unsatisfactory job, so several heating units from General Electric six-pound flatirons were grouped around an iron core three and one-quarter inches in diameter and placed in the six-inch hole in the crank disk. In four hours after the current was turned on the disk had expanded sufficiently to allow the crankpin to slip in. Although the heating units were at about white heat all of the time, they were not injured except that the brass tubing on two was slightly melted in one place. The heating units were replaced in the flatirons, and have been in use for the last three months, one of them being in a laundry, where their active service averages 40 hours each week. The General Electric Co. of Schenectady, N. Y., manufactures the electric flatirons used.

### Water-Softening News.

In 1900 the Tonawanda Iron & Steel Co. of North Tonawanda, N. Y., installed a 4000-horse-power We-Fu-Go water-softening and purifying system. Since that time it has been necessary to open the boilers only once a year for washing out and inspection. The company has just placed a second order with the Wm. B. Scaife & Sons Company of Pittsburgh, Pa., for an addition to the present system, to take care of increased boiler capacity of 4000 horse-power, making a total of 8000 horse-power. Other recent orders taken by the Wm. B. Scaife & Sons Company for We-Fu-Go and Scaife water-softening and purifying systems are the following: Rochester & Pittsburgh Coal & Iron Co., Walston, Pa., 1250-horse-power We-Fu-Go system, fourth order; Clearfield Bituminous Coal Corporation, Rosalia, Pa., 1800-horse-power We-Fu-Go system; Wickwire Steel Co., Buffalo, N. Y., 4000-horse-power We-Fu-Go system; Union Brewing Co., Sharon, Pa., 500-horse-power We-Fu-Go system; Saratoga Textile Co., Saratoga Springs, N. Y., 2400-gallon-per-hour We-Fu-Go system; American Sheet & Tinplate Co., Cambridge, Ohio, 2000-horse-power We-Fu-Go system; George J. Renner, Jr., brewer, Youngstown, Ohio, 500-horse-power Scaife system, and People's Brewing Co., Terre Haute, Ind., 700-horse-power We-Fu-Go system.

### Durability of Blakeslee Pumps.

The wearing qualities of the Blakeslee pumps are indicated in the plant of the Du Quoin (Ill.) Utility Co. This was originally the ice and cold-storage plant of the town, subsequently became the electric-light and power plant, and has recently taken over the contract for pumping the city water. There are used in it two Blakeslee well pumps, style No. 4, which have been in service over six years. There are two machines for pumping the condenser water, these being of the No. 1 B type, which have

also been in service for a long time. One of the boiler-feed pumps is of the single type No. 6 that has been in continuous use for eight or ten years, while beside it is one of the duplex pumps, which is used as an auxiliary, owing to a large increase in boiler capacity. Perhaps the machine that is the most interesting of all is the brine pump, which has been in constant service ever since the plant was established, and which was transferred to this plant from another one, so that all told it has a record of about 15 years' work. In summer this pump is in operation 24 hours a day, and in all of its long service there has never been a moment's fault found with it. There has never been any repacking except once, and that was on the piston. The Blakeslee Manufacturing Co. of Du Quoin, Ill., manufactures these pumps.

### For Cold Rooms Hard to Heat.

The coming cold weather gives rise to the question of how best to heat those rooms and hallways of the house that seldom, if ever, warm up, no matter how big a fire there may be in the furnace or other heating apparatus. The best way out of the difficulty is the use of auxiliary stoves, and of these it would be difficult indeed to find anything more handy and more clean and economical than the Perfection oil heater. This heater is safe. The wick can be turned as high or as low as possible without danger. But perhaps the most desirable feature of all is its convenience. The Perfection oil heater can be easily carried to any part of the house where more heat is required—it may be a cold bedroom, a chilly hallway, a sickroom. Or you can use it to heat the bathroom while you take your morning bath, then dress by it, and then carry it to the dining-room and eat your breakfast in comfort. The occasions on which it can be called into use are numerous, and once you have tried the Perfection oil heater you'll wonder why you ever struggled through a cold winter without one. Another advantage is the smokeless burner, which prevents any of the unpleasantnesses that perhaps have given you a poor idea of oil heaters in general. Another home comfort for the long winter evenings is the Rayo lamp, which can be used in any room in the house, from parlor to bedroom. It has the latest-improved burner, making it unusually safe and clean and an ideal lamp for all-round household use.

## TRADE LITERATURE.

### The "A B C" Drykilns.

Sectional catalogue No. 225, which is the latest edition of its drykiln catalogues, has been issued by the American Blower Co. of Detroit, Mich. The publication covers the latest ideas in drykilns and illustrates and describes the "A B C" drykilns, blowing apparatus and drykiln specialties. The American Blower Co. also manufactures blowers and equipment for ventilating mines and for other purposes.

### Universal Portland Cement.

Bulletin No. 43 has been issued by the Universal Portland Cement Co., Commercial Bank Building, Chicago, Ill., and Frick Building, Pittsburgh, Pa. The publication contains a description of the Shoshone irrigation project in Wyoming, with a photograph of the Corbett tunnel, in which Universal Portland cement was used, together with photographs of other important construction work using the same product.

### Peteler Industrial and Mine Cars.

The success of the Peteler cars is said to be due to the fact that the best materials and construction have been employed in their manufacture and close attention given to the increased demands made on them. These cars are manufactured by the Kilgore-Peteler Company, University avenue southeast and Thirtieth avenue, Minneapolis, Minn., and are for handling every class of material on narrow-gauge railroads, for mines, shops, sawmills, power plants, plantations, docks, warehouses, quarries, etc. They are comprehensively described and illustrated in catalogue No. 5 which the company has issued.

### Interested in Coal Properties?

If you are interested in the prospecting or proving of coal properties you will find data for profitable reading in a pamphlet published by the Sullivan Machinery Co., offices in Railway Exchange, Chicago, Ill. This company refers to coal prospecting and proving as follows: "We are contractors for such work, employing the Sullivan diamond core drill, with improved devices for recovering the friable coal core entire. We have been engaged in this for 30 years, and our experience covers every coal field in the country. If interested, write for rates per

foot and 160-page illustrated book on diamond drilling, No. 155."

### Some Portland Cement Literature.

Several bits of literature recently published are of interest to people who are concerned in the purchase and use of Portland cement. They give some brief facts as to a certain brand of cement which is called for in immense quantities and the demand for which is steadily increasing because of the results obtained from its use. One of the bits of literature is a card showing tests, and is of special interest to construction engineers and contractors. Messrs. Samuel H. French & Co. of Philadelphia, Pa., publishers of the literature referred to, will send copies to any applicant interested in the subject. They are agents for the well-known Dexter Portland cement.

### The Moline McCormick Turbine.

Since turbine water-wheels came into use over 50 years ago their adoption for power development in industrial plants has been extensive. Engineers have given much attention to the designing and manufacturing of the turbine, and among the leading types is that known as the Moline McCormick turbine. This turbine is completely described, the text being accompanied by photographic views, in a pamphlet now being distributed. The pamphlet is catalogue No. 1 of the Barnard & Leas Manufacturing Co. of Moline, Ill., which company manufactures the Moline McCormick turbine. Anyone interested in water-power development will find it advantageous to consult the Barnard & Leas publication.

### Modern Ice and Refrigerating Machinery.

Modern methods and apparatus for manufacturing ice and refrigerating are treated in an interesting way in recent bulletins published by the York Manufacturing Co. of York, Pa. This company is well and widely known for the success it has met in designing and building ice and refrigerating equipments, its plants having been installed throughout the entire United States and in various foreign countries. The recent York bulletins tell of the company's extensive plant, its sales during past years, its many satisfied customers, and gives details of the vertical single-acting ice-making and refrigerating machines, the horizontal double-acting types, and other improved apparatus built at the York works.

### Direct Heat Rotary Blast Driers.

Users of driers are having called to their attention the facilities offered by the American Process Co. for installing that class of equipment. The company is sending out to prospective buyers an illustrated leaflet which briefly yet thoroughly describes the direct heat rotary blast driers for handling sand. The machine is of heavy construction throughout, all wearing parts are exposed to view, and they can be constantly watched. The tires are of open-hearth steel, the wheels being especially chilled for their purpose. A large number of sand-lime brick plants, glass-sand plants and plaster plants have been equipped with the type of drier noted. The American Process Co. invites investigation of the results its machine accomplishes. Write to the offices at 62 William street, New York.

### Mechanical Rubber Goods.

Rubber goods for mechanical purposes comprise products that are in constant demand in the industrial world. Their design and manufacture has attracted the attention of some of the leading inventors and manufacturers. Prominent in this field is the New Jersey Car Spring & Rubber Co. of Jersey City, N. J. The company is now issuing its latest illustrated catalogue, which is replete with information regarding the hose, belting, packing, gaskets, cushions, rollers, mats, pads, treads and numerous other rubber articles made in the company's large and modern plant. This is one of the oldest companies engaged in this avenue of activity, it having been established in 1858, and the New Jersey Car Spring & Rubber Co.'s output is well and favorably known wherever rubber goods for mechanical purposes are used.

### The Sprague Electric Hoists.

Lifting and conveying are operations required in almost every avenue of industrial activity, and as a consequence inventors have given their consideration to the designing of mechanical equipments for that purpose. Probably no manufacturer is better known in this field than the Sprague Electric Co. of 527 West 34th street, New York. That company has become well known in an ever-widening field for its improved electric hoists, now used in foundries, mills, factories and other industrial plants, in construc-

tion work and mining developments and elsewhere. The company has published a complete catalogue of its hoists, the descriptive text being accompanied by numerous photographic views and diagrams, enabling the reader to thoroughly comprehend just what and how economically the Sprague electric hoists are able to accomplish for their users. The manager of any enterprise requiring lifting and conveying machinery will be profited by examining the Sprague publication.

#### High-Grade Track Material.

Activity in railway construction for general transportation lines, street railways, mining developments, lumbering, industrial plants and for other purposes has created a large demand for high-grade track material during recent years. This market has been ably met by American manufacturers, prominent among whom is the Indianapolis Switch & Frog Co. of Indianapolis, Ind. This company is issuing a complete illustrated catalogue of its products, which are offered as embodying the highest quality in manufactures of their class. It states that only the best materials and methods are used in manufacturing, and the designs are those that have been accepted by some of the most exacting buyers for railway construction throughout the country. The Indianapolis catalogue is a regular compendium of high-grade track material, and should be consulted by all who are seeking to purchase or invite bids on track material that has been proven to be efficient and durable.

#### Excavating Rock by Machinery.

There is now being distributed a pamphlet which gives important information of interest to people concerned in the excavation of rock by machinery. The publication is exceptionally well printed and illustrated by photographic views. Its object is the description of the Sullivan rock drills and of their advantages, the illustration of their use in excavating rock under various conditions and for different purposes, the suggestion of proper methods for their care and operation, and the listing of fittings and supplies in a form convenient for purchasers. The demand of present-day conditions is insistent for economy of time and labor. Sullivan rock drills are available for every class of rock excavation formerly done by hand, and perform this work far more efficiently. In the catalogue the attempt has been made to demonstrate the excellence of these machines and their suitability for the duties required of them. In addition to the standard reciprocating drills for general use in mining, quarrying and contracting, brief mention is made of the Sullivan air-hammer drills for lighter work. These machines are more fully described in special bulletins. The Sullivan stone-channeling machines, hitherto catalogued under the same cover with Sullivan rock drills, are now treated of in a separate pamphlet. Sullivan air compressors are briefly mentioned in the new catalogue for the convenience of those considering the installation of complete plants. A special catalogue is issued on this important subject. Careful and prompt attention is given by the company's engineers, either personally or by correspondence, to problems in connection with drilling work which may be offered for solution. The Sullivan Machinery Co. has its main offices in the Railway Exchange, Chicago, Ill.

## FINANCIAL NEWS

The MANUFACTURERS' RECORD invites information about Southern financial matters. Items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

#### Review of the Baltimore Market.

Office MANUFACTURERS' RECORD,  
Baltimore, Md., December 18.

The Baltimore stock market has been dull during the past week. In the trading United Railways common sold at 10; do. trust certificates, 10; the income bonds from 44½ to 45½; the funding 5s from 71½ to 70½; the funding scrip from 71½ to 70, last sale at 70½; United 4s from 82 to 80½; Gas 5s, 103½ to 103¼; Seaboard 4s, 66½ to 66; G. B. S. incomes, 14. Third National Bank sold at 110 to 112; Maryland Casualty, 58 to 57½.

Other securities were traded in as follows: Houston Oil, 4¼ to 5; Atlantic

Coast Line 4s, 84¼; Baltimore Traction 5s, 106; Charleston & West Carolina 5s, 100; Georgia & Alabama Consolidated 5s, 98½; Georgia, Carolina & Northern 5s, 101; Macon Railway & Light 5s, 90; Richmond & Danville gold 6s, 107½; Northern Central Railway stock, 80 to 80½; Western Maryland Railroad stock, 6¾ to 5¾; do. 4 per cent. bonds, 64 to 63½; American Ice debenture 6s, 75; North Carolina 4s, 98; City & Suburban 5s, Baltimore, 105; Southern Railway 5s, 96; Virginia new 3s, 88½; Northern Central 4½s, 104½; Norfolk City 5s, 1914, 101; Baltimore City Passenger 5s, 96¾ to 99; Charlotte, Columbia & Augusta 1st, 100¼; Maryland Telephone 5s, 84¼; Baltimore City 3½s, 1930, 91¼.

## SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended  
December 18, 1907.

Railroad Stocks.	Par.	Bid.	Asked.
Atlantic Coast Line.....	100	65½	66
Georgia Sou. & Fla. 2d Pfd.....	100	56	70
Seaboard Company Common.....	100	11	12½
Seaboard Company 1st Pfd.....	100	50	55
Seaboard Company 2d Pfd.....	100	20	25
National Bank of Commerce.....	15	30	30
United Railways & Elec. Co. 50	50	10	10½
Western Maryland.....	50	5	6

Bank Stocks.	Par.	Bid.	Asked.
Citizens' National Bank.....	10	20	32
Farmers & Mer. Nat. Bank.....	40	50	50
Maryland National Bank.....	20	15	16
National Bank of Baltimore.....	100	110	117
National Bank of Commerce.....	15	30	30
National Exchange Bank.....	100	160	172½
National Mechanics' Bank.....	10	28	28
National Union Bank of Md.....	100	110	110
Third National Bank.....	100	112	115

Fruit, Fidelity and Casualty Stocks.	Par.	Bid.	Asked.
American Bonding Co.....	25	42½	50
Fidelity & Deposit.....	50	107	115
Maryland Casualty.....	25	58½	62
Maryland Trust Pfd.....	100	95	95

Miscellaneous Stocks.	Par.	Bid.	Asked.
G. B. S. Brewing Co.....	100	2	2

Railroad Bonds.	Par.	Bid.	Asked.
Albany & Northern 5s, 1946.....	100	92½	95
Atlanta & Charlotte Ext. 4½s.....	100	97½	100
Atlantic Coast Line 1st 4s, 1922.....	100	84½	84½
Balto. & Harrisburg Ext. 5s, 1938.....	100	96	99½
Carolina Central 4s, 1949.....	100	82	84
Charleston & West. Car. 5s, 1946.....	100	90½	100
Char. Col. & Aug. 1st 5s, 1910.....	100	99	99
Char. Col. & Aug. 2d 7s, 1910.....	100	99	99
Columbia & Greenville 1st 5s, 1916.....	100	107	107½
Georgia & Alabama 5s, 1945.....	100	98½	100
Georgia, Car. & North 1st 5s, 1929.....	100	100	101
Georgia Pacific 1st 6s, 1929.....	100	109½	110
Georgia Sou. & Fla. 1st 5s, 1945.....	100	101½	101½
Maryland & Pennsylvania 4s, 1951.....	100	80	80
Piedmont & Cum. 1st 5s, 1911.....	100	95	95
Potomac Valley 1st 5s, 1941.....	100	95	105
Raleigh & Augusta 1st 6s, 1926.....	100	110	113
Richmond & Dan. Gold 6s, 1915.....	100	108½	108½
Savannah, Fla. & West 5s, 1934.....	100	109	109
Seaboard Air Line 4s, 1950.....	100	65	66
Seaboard Air Line 5s, 10-year, 1911.....	100	90½	90½
Seaboard & Roanoke 5s, 1926.....	100	105	105
Southern Railway Co. 5s, 1994.....	100	95	97
Virginia Midland 2d 6s, 1911.....	100	100	100
Washington Terminal 3½s.....	100	83½	84½
Western Maryland 4s, 1952.....	100	61	62
West Virginia 1st 6s, 1911.....	100	47½	47½
Wilmington, Col. & Aug. 6s, 1910.....	100	100	100
Wilmington & Wel. Gold 5s, 1935.....	100	105½	105½

Street Railway Bonds.	Par.	Bid.	Asked.
Anacostia & Potomac 5s, 1949.....	100	97	97
Atlanta Con. St. Ry. 5s.....	100	99	99
Baltimore City Passenger 5s, 1911.....	100	98½	99
Balto. Sp. Pt. & Ches. 4½s.....	100	85	85
Baltimore Traction 1st 5s, 1929.....	100	105	107½
Cent. Rwy. Con. 5s (Balto.), 1932.....	100	105	105
Charleston Con. Electric 5s, 1939.....	100	88	88
City & Suburban 5s (Balto.), 1922.....	100	104½	104½
City & Suburban 5s (Wash.), 1948.....	100	95	97½
Metropolitan 5s (Wash.), 1925.....	100	105½	105½
Norfolk Railway & Light 5s.....	100	87	90
Norfolk Street Railway 5s, 1944.....	100	97	103
North Baltimore 5s, 1942.....	100	107	108½
Richmond Traction 5s.....	100	101	101
United Railways 1st 4s, 1949.....	100	80½	81
United Railways Inc. 4s, 1949.....	100	45	45½
United Railways Funding 5s.....	100	70¼	70½

Miscellaneous Bonds.	Par.	Bid.	Asked.
Atlanta Gas 1st 5s, 1917.....	100	96	96
Consolidated Gas 5s, 1910.....	100	103½	103½
Consolidated Gas 5s, 1939.....	100	104½	104½
Con. Gas, Elec. Lt. & Power 4½s.....	100	98½	98½
G. B. S. Brewing 1sts.....	40	40	40
G. B. S. Brewing 2d Incomes.....	13	14	14
Maryland Telephone 5s.....	84	86	86
Mt. Vernon-Woodby Cot. Duck 5s.....	74	74	74

## SOUTHERN COTTON-MILL STOCKS

Quotations Furnished by Hugh Mac-  
Rae & Co., Wilmington, N. C., for  
Week Ending December 18.

	Par.	Bid.	Asked.
Abbeville Cotton Mills (S. C.).....	100	88	88
Aiken Mfg. Co. (S. C.).....	100	90	90
American Spinning Co. (S. C.).....	100	130	150
Anderson Cotton Mills (S. C.).....	100	70	70
Arkwright Mills (S. C.).....	100	110	110
Augusta Factory (Ga.).....	100	77	77
Avondale Mills (S. C.).....	100	115	121
Belton Mills (S. C.).....	100	115	121
Bibb Mfg. Co. (Ga.).....	100	113½	113½
Brandon Cotton Mills (S. C.).....	100	130	130
Cabarrus Cotton Mills (N. C.).....	100	120	127
Chadwick Mfg. Co. (N. C.) Pfd.....	100	101	101
Chiquola Mfg. Co. (S. C.).....	100	121	130
Clifton Mfg. Co. (S. C.).....	100	115	115
Clinton Mfg. Co. (S. C.) Pfd.....	100	101	101
Clinton Cotton Mill (S. C.).....	100	150	150
Columbus Mfg. Co. (Ga.).....	100	96	98
Courtenay Mfg. Co. (S. C.).....	100	97½	97½
Dallas Mfg. Co. (Ala.).....	100	86	100
Darlington Mfg. Co. (S. C.).....	100	85	85

Eagle & Phenix Mills (Ga.).....	130	137½
Easley Cotton Mills (S. C.).....	145	150
Enoree Mfg. Co. (S. C.).....	70	80
Enoree Mfg. Co. (S. C.) Pfd.....	100	100
Enterprise Mfg. Co. (Ga.).....	90	90
Exposition Cotton Mills (Ga.).....	225	240
Gaffney Mfg. Co. (S. C.).....	90	90
Gainesville Cotton Mills (Ga.).....	50	50
Granby Cot. Mills (S. C.) 1st Pfd.....	45	52
Granville Mfg. Co. (S. C.).....	160	165
Greenwood Cotton Mills (S. C.).....	97	98½
Grendel Mills (S. C.).....	120	122½
Henrietta Mills (N. C.).....	161	175
King Mfg. Co., John P. (Ga.).....	98	98
Lancaster Cotton Mills (S. C.).....	98	98
Lancaster Cot. Mills (S. C.) Pfd.....	91	96
Langley Mfg. Co. (S. C.).....	91	91
Laurens Cotton Mill (S. C.).....	151	151
Limestone Mills (S. C.).....	140	150
Lockhart Mills (S. C.).....	91	91
Lockhart Mills (S. C.) Pfd.....	97	100
Louise Mills (N. C.).....	90	90
Marlboro Cotton Mills (S. C.).....	88	88½
Mayboro Mills (S. C.).....	105	185
Mills Mfg. Co. (S. C.).....	110	110
Mills Mfg. Co. (S. C.) Pfd.....	106	111
Monaghan Mills (S. C.).....	115	120
Monarch Cotton Mills (S. C.).....	106	108½
Newberry Cotton Mills (S. C.).....	140	150
Norris Cotton Mills (S. C.).....	120	121
Olympia Cot. Mills (S. C.) Pfd.....	68	70
Orangeburg Cot. Mills (S. C.) Pfd.....	80	98
Orr Cotton Mills (S. C.).....	107	107
Pacolet Mfg. Co. (S. C.).....	170	170
Pacolet Mfg. Co. (S. C.) Pfd.....	101	103½
Pelzer Mfg. Co. (S. C.).....	165	176
Piedmont Mfg. Co. (S. C.).....	165	176
Poe Mfg. Co. (S. C.).....	128	135
Raleigh Cotton Mills (N. C.).....	100	105
Richland Cot. Mills (S. C.) Pfd.....	55	55
Roanoke Mills (N. C.).....	160	165
Saxon Mills (S. C.).....	125	125
Sibley Mfg. Co. (Ga.).....	63	65
Spartan Mills (S. C.).....	145	145
Springstein Mills (S. C.).....	100	100
Trion Mfg. Co. (Ga.).....	127½	127½
Tucapau Mills (S. C.).....	200	200
Union-Buffalo Mills (S. C.) 1st Pfd.....	67	69
Victor Mfg. Co. (S. C.).....	128	130
Warren Mfg. Co. (S. C.).....	92	93½
Warren Mfg. Co. (S. C.) Pfd.....	105	105
Washington Mills (Va.).....	25	25
Washington Mills (S. C.) Pfd.....	160	160
Whitney Mfg. Co. (S. C.).....	125	125
Wiscasset Mills (N. C.).....	115	120
Woodruff Cotton Mills (S. C.).....	130	137
Woodside Cotton Mills (S. C.).....	110½	110½

Quotations Furnished by William S.  
Glenn, Broker, Spartanburg, S. C.,  
for Week Ending December 16.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.).....	85	90
Aetna Cotton Mills (S. C.) Pfd.....	75	75
Aiken Mfg. Co. (S. C.).....	82	89
American Spinning Co. (S. C.).....	145	145
Anderson Cotton Mills (S. C.).....	75	75
Arcadia Mills (S. C.).....	98	101
Arkwright Cotton Mills (S. C.).....	109	109
Augusta Factory (Ga.).....	80	85
Avondale Mills (Ala.).....	110	110
Belton Mills (S. C.).....	118	122
Brandon Mills (S. C.).....	125	130
Brogan Mills (S. C.).....	49	45
Cabarrus Cotton Mills (N. C.).....	125	125
Chadwick Mfg. Co. (N. C.) Pfd.....	103	103
Chiquola Mfg. Co. (S. C.).....	118	125
Clifton Mfg. Co. (S. C.).....	110	115
Clifton Mfg. Co. (S. C.) Pfd.....	101	101
Clinton Cotton Mills (S. C.).....	155	155
Columbus Mfg. Co. (Ga.).....	94	98
Courtenay Mfg. Co. (S. C.).....	100	100
Dallas Mfg. Co. (S. C.).....	95	100
Darlington Mfg. Co. (S. C.).....	80	85
D. E. Converse Co. (S. C.).....	112	112
Drayton Mills (S. C.).....	107	107
Eagle & Phenix Mills (Ga.).....	130	135
Easley Cotton Mills (S. C.).....	145	150
Enoree Mfg. Co. (S. C.).....	70	82
Enoree Mfg. Co. (S. C.) Pfd.....	100	102
Enterprise Mfg. Co. (Ga.).....	82	90
Exposition Cotton Mills (Ga.).....	225	225
Gaffney Mfg. Co. (S. C.).....	84	89
Gainesville Cotton Mills (Ga.).....	57	60
Glenwood Mills (S. C.) Cotton.....	122	122
Gluck Mills (S. C.).....	90	95
Granby Cot. Mills (S. C.) 1st Pfd.....	59	59
Granville Mfg. Co. (S. C.).....	160	165
Greenwood Cotton Mills (S. C.).....	94	98
Grendel Mills (S. C.).....	118	118
Hartsville Cotton Mill (S. C.).....	122	120
Henrietta Mills (N. C.).....	165	165
Inman Mills (S. C.).....	100	102
King Mfg. Co., J. P. (Ga.).....	97	103
Lancaster Cotton Mills (S. C.).....	102	110
Lancaster Cot. Mills (S. C.) Pfd.....	92	99
Langley Mfg. Co. (S. C.).....	92	96
Laurens Mills (S. C.).....	150	162
Limestone Mills (S. C.).....	140	150
Lockhart Mills (S. C.).....	90	95
Lockhart Mills (S. C.) Pfd.....	101	101
Loray Cotton Mills (N. C.) Pfd.....	90	100
Marlboro Cotton Mills (S. C.).....	80	90
Mills Mfg. Co. (S. C.).....	109	109
Molokhon Mfg. Co. (S. C.).....	110	110
Monaghan Mills (S. C.).....	117	117
Monarch Cotton Mills (S. C.).....	105	100
Newberry Cotton Mills (S. C.).....	127	127
Ninety-Six Cotton Mills (S. C.).....	115	120
Norris Cotton Mills (S. C.).....	117	122
Odell Mfg. Co. (N. C.).....	90	90
Olympia Cotton Mills (S. C.).....	70	80
Orr Cotton Mills (S. C.).....	105	110
Pacolet Mfg. Co. (S. C.).....	170	180
Pacolet Mfg. Co. (S. C.) Pfd.....	101	104
Pelzer Mfg. Co. (S. C.).....	167	175
Piedmont Mfg. Co. (S. C.).....	170	170
Poe Mfg. Co., F. W. (S. C.).....	125	135
Saxon Mills (S. C.).....	124	128
Sibley Mfg. Co. (Ga.).....	58	63
Spartan Mills (S. C.).....	140	148
Stapleton Mills (Ga.).....	132	140
Tupacula Mills (S. C.).....	195	195
Union-Buttalo (S. C.) 1st Pfd.....	70	70
Union-Buttalo (S. C.) 2d Pfd.....	20	37
Victor Mfg. Co. (S. C.).....	130	130
Warren Mfg. Co. (S. C.).....	90	97
Warren Mfg. Co. (S. C.) Pfd.....	106	107
Washington Mills (Va.).....	25	25
Washington Mills (Va.) Pfd.....	100	115
Whitney Mfg. Co. (S. C.).....	115	150
Williamston Mills (S. C.).....	109	109
Wilkesboro Mills (N. C.).....	127	127
Woodruff Cotton Mills (S. C.).....	130	135
Williamston Mills (S. C.).....	105	105



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